AP3020 and AP3020X Indoor Access Point Installation Guide

Setup, Configuration, and Specifications

9041103-00 Rev AA
November 2026



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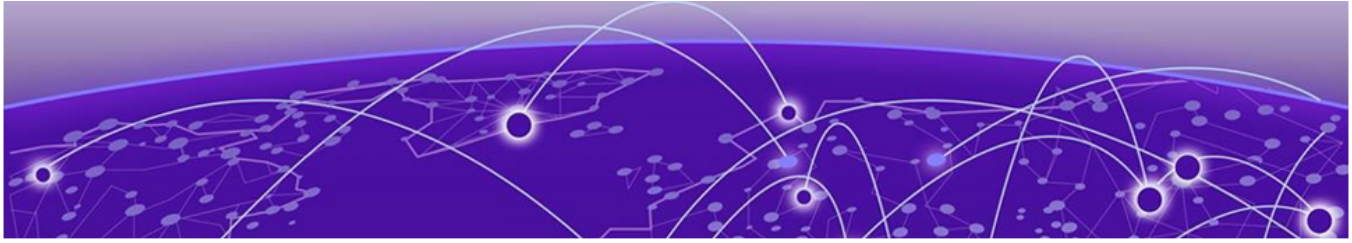


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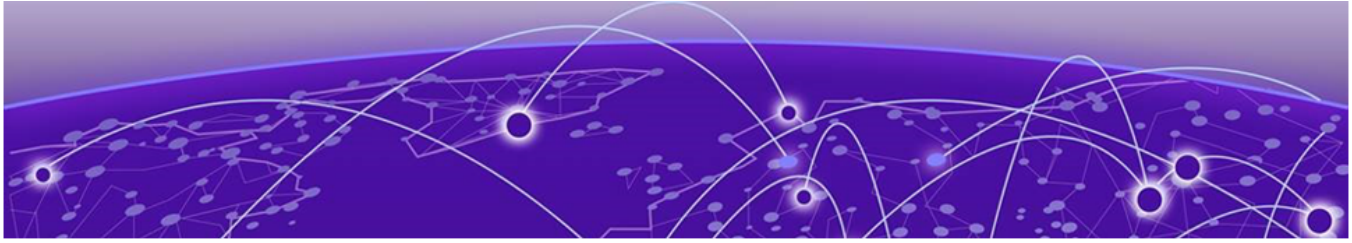
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Abstract

This installation guide for the Extreme Networks AP3020 and AP3020X covers hardware specifications, mounting procedures, network onboarding, and regulatory compliance for a Wi-Fi 7 (802.11be) universal indoor access point targeted at high-density environments such as schools, warehouses, healthcare facilities, and stadiums. Both models feature a dual 2x2 radio design, a dedicated sensor, two IoT radios (Bluetooth 5.4 LE, Thread/Zigbee-ready, IEEE 802.15.4), and a single multi-rate ETH0 port (100/1000/2500 Mbps). The AP3020 uses internal antennas; the AP3020X uses external antennas with an integral 6 GHz antenna. Four software operating modes are supported — Mode 1 (2.4/5 GHz), Mode 2 (5/6 GHz), Mode 3 (Dual 5 GHz), and Mode 4 (2.4/6 GHz, AP3020 only, LPI only) — with Standard Power 6 GHz support varying by country. Power is delivered using 802.3af or 802.3at PoE, with USB power (5W) available under 802.3at. Security features include WPA3, L2-L7 DPI firewall, tri-frequency security, PPSK, and Extreme Fabric Attach support. Mounting procedures cover standard flat T-bar ceilings, sculpted ceiling tiles, Silhouette ceilings, 9/16-inch and 15/16-inch T-bars, beams, junction boxes, direct-to-wall, and the WNGADAPT legacy bracket adapter. Pre-installation guidance addresses site survey considerations, DHCP/DNS/NTP prerequisites, and PoE validation. Network onboarding is supported using automatic DHCP-based discovery or the ExtremeCloud IQ Mobile Onboarding App. Regulatory and compliance information covers FCC, CE, Industry Canada, and regional notices for Brazil, China, Japan, Mexico, Israel, Egypt, Thailand, Taiwan, the UK, and EU member states.

Text Conventions

Unless otherwise noted, information in this document applies to all supported environments for the products in question. Exceptions, like command keywords associated with a specific software version, are identified in the text.

When a feature, function, or operation pertains to a specific hardware product, the product name is used. When features, functions, and operations are the same across an entire product family, such as Extreme Networks switches, the product is referred to as *the switch*.

Table 1: Notes and warnings

Icon	Notice type	Alerts you to...
	Tip	Helpful tips and notices for using the product
	Note	Useful information or instructions
	Important	Important features or instructions
	Caution	Risk of personal injury, system damage, or loss of data
	Warning	Risk of severe personal injury

Table 2: Text

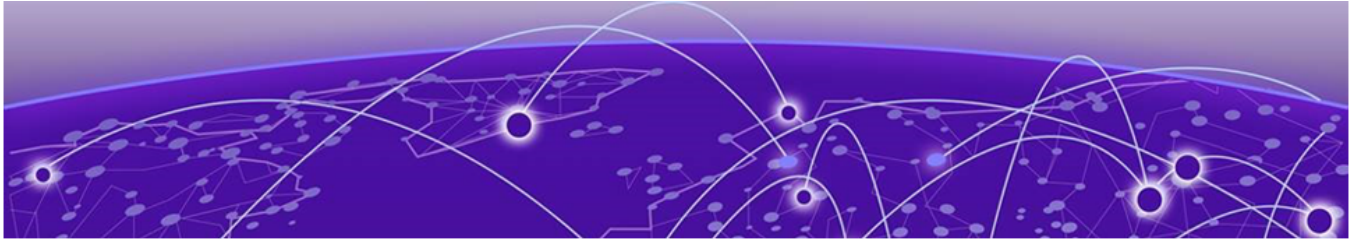
Convention	Description
`screen displays`	This typeface indicates command syntax, or represents information as it is displayed on the screen.
The words *enter* and *type*	When you see the word *enter* in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says *type*.
Key names	Key names are written in boldface, for example **Ctrl** or **Esc**. If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press **Ctrl**+**Alt**+**Del**

Table 2: Text (continued)

Convention	Description
Words in italicized type	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.
NEW!	New information. In a PDF, this is searchable text.

Table 3: Command syntax

Convention	Description
bold text	Bold text indicates command names, keywords, and command options.
italic text	Italic text indicates variable content.
`[ ]`	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
`{ x | y | z }`	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
`x | y`	A vertical bar separates mutually exclusive elements.
`< >`	Nonprinting characters, such as passwords, are enclosed in angle brackets.
…	Repeat the previous element, for example, *member*`[`*member*`...]`.
\	In command examples, the backslash indicates a “soft” line break. When a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.



Documentation and Training

Find Extreme Networks product information at the following locations:

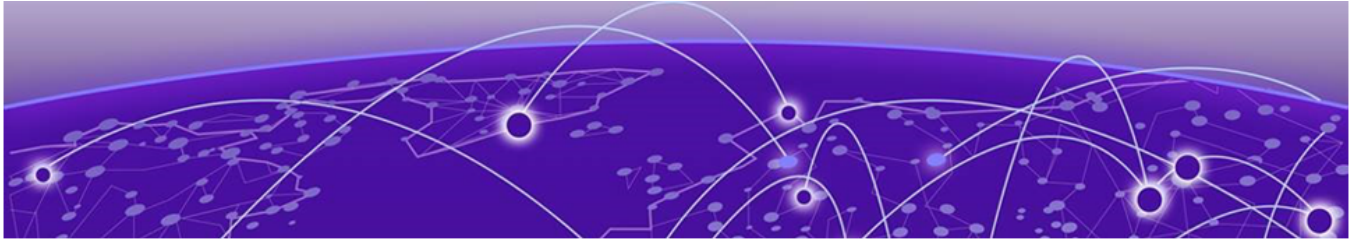
- Current Product Documentation
- Release Notes
- Hardware and Software Compatibility for Extreme Networks products
- Extreme Optics Compatibility
- Other Resources such as articles, white papers, and case studies

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If you require assistance, contact Extreme Networks using one of the following methods:

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For customers with Extreme Platform ONE™ ExtremeWorks / ExtremeWorks Premier subscriptions, technical support cases can be created using Extreme Agent ONE™ Coworker. This option requires that a user has an existing Extreme Networks Support Portal account login (using the same email address as used to log into Extreme Platform ONE™ Networking.) For more information about Extreme Agent ONE™ Coworker “Talk to Support”, see the Extreme Agent ONE™ Coworker documentation.

Extreme Portal

Search the GTAC (Global Technical Assistance Center) knowledge base; manage support cases and service contracts; download software; and obtain product licensing, training, and certifications.

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A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

Call GTAC

For immediate support: (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2800. For the support phone number in your country, visit www.extremenetworks.com/support/contact.

Before contacting Extreme Networks for technical support, have the following information ready:

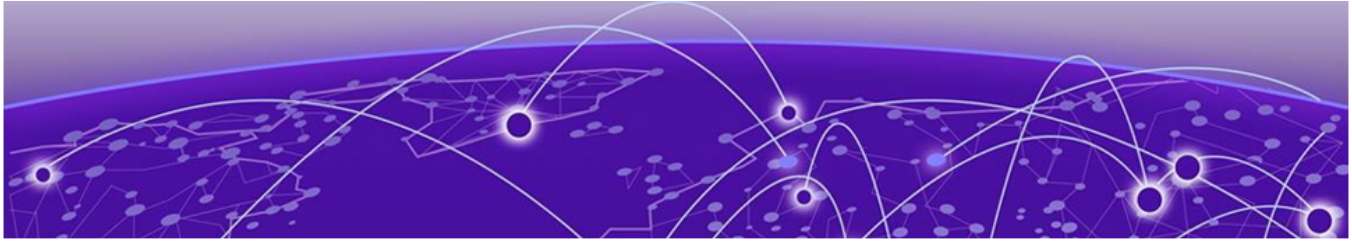
- Your Extreme Networks service contract number, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

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2. In the list of categories, expand the **Product Announcements** list.
3. Select a product for which you would like to receive notifications.
4. Select **Subscribe**.
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- Content errors, or confusing or conflicting information.
- Improvements that would help you find relevant information.
- Broken links or usability issues.

To send feedback, email us at Product-Documentation@extremenetworks.com.

Provide as much detail as possible including the publication title, topic heading, and page number (if applicable), along with your comments and suggestions for improvement.

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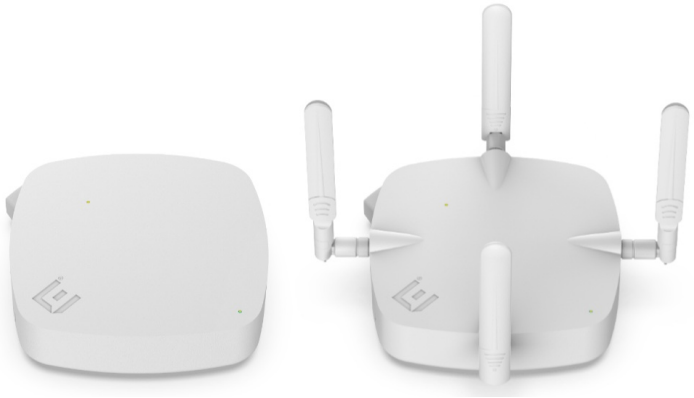


Figure 1: AP3020 and AP3020X

The AP3020/X is a universal indoor access point with a Wi-Fi 7 dual radio (2 2x2:2). It is designed for high-density environments such as schools, warehouses, healthcare facilities, and stadiums.

Note
The AP3020/X USB port has a locking mechanism that prevents devices plugged into the port from being dislodged.

The AP3020/X uses the 802.11 wireless standards (802.11a/b/g6 GHz./n/ac/ax/be) for network communications, and bridge network traffic to an Ethernet LAN. It can operate in either the cloud with ExtremeCloud IQ or in an on-premises environment with ExtremeCloud IQ Controller.

The AP3020 has internal antennas. The AP3020X has two fixed or integral antennas, as well as two antenna ports for additional antennas.

An integral antenna is a permanently fixed antenna that cannot be removed.

You can operate the APs in the following software modes:

- Mode 1: 2.4 GHz and 5 GHz
- Mode 2: 5 GHz and 6 GHz
- Mode 3: Dual 5 GHz
- Mode 4 (AP3020 only): 2.4 GHz and 6 GHz. **The AP3020X does not support Standard Power (SP) in Mode 4**.

For more information about available software modes, see Radios.

Important

Before you install your AP, read the deployment and onboarding information in ExtremeCloud IQ Controller Deployment Guide for on-premises deployments or the Extreme Platform ONE Networking User Guide for a Cloud deployment.

Extreme Networks devices, including access points, require firmware updates to ensure optimal performance and security. During deployment, upgrade your APs to the latest firmware.

Purchase Information

Use the following information when you order your AP. Extreme Networks sells the AP3020/X with the AH-ACC-BKT-AX-TB mounting bracket.

Table 4: Access Point Part Number

Part Number	Description
AP3020-WW	Indoor Dual Radio Wi-Fi 7 AP, 2.4 GHz and 5 GHz or 5GHz and 6GHz OR Dual 5 GHz, Multi-rate Port, Internal antennas. IoT Radio, Includes AH-ACC-BKT-AX-TB mounting bracket. Domain: World SKU
AP3020-WW-TAA	Indoor Dual Radio Wi-Fi 7 AP, 2.4 GHz and 5 GHz or 5GHz and 6GHz OR Dual 5 GHz, Multi-rate Port, Internal antennas. IoT Radio, Includes AH-ACC-BKT-AX-TB mounting bracket. Domain: World SKU TAA Compliant
AP3020-EG	Indoor Dual Radio Wi-Fi 7 AP, 2.4 GHz and 5 GHz or 5GHz and 6GHz OR Dual 5 GHz, Multi-rate Port, Internal antennas. IoT Radio, Includes AH-ACC-BKT-AX-TB mounting bracket. Domain: Egypt
AP3020-IL	Indoor Dual Radio Wi-Fi 7 AP, 2.4 GHz and 5 GHz or 5GHz and 6GHz OR Dual 5 GHz, Multi-rate Port, Internal antennas. IoT Radio, Includes AH-ACC-BKT-AX-TB mounting bracket. Domain: Israel
AP3020X-WW	Indoor Dual Radio Wi-Fi 7 (2x2:2): 2.4 GHz & 5 GHz or 5 GHz & 6 GHz, Dual 5 GHz, Dual IoT, Multi - rate Port, External antennas. Integral on 6 GHz. Includes (2) ML-2452-APA2-02 & AH-ACC-BKT-AX - TB mounting bracket. Domain: World SKU

Table 4: Access Point Part Number (continued)

Part Number	Description
AP3020X-WW-TAA	Indoor Dual Radio Wi-Fi 7 (2x2:2): 2.4 GHz & 5 GHz or 5 GHz & 6 GHz, Dual 5 GHz, Dual IoT, Multi - rate Port, External antennas. Integral on 6 GHz. Includes (2) ML-2452-APA2-02 & AH-ACC-BKT-AX-TB mounting bracket. Domain: TAA Compliant
AP3020X-IL	Indoor Dual Radio Wi-Fi 7 (2x2:2): 2.4 GHz & 5 GHz or 5 GHz & 6 GHz, Dual 5 GHz, Dual IoT, Multi - rate Port, External antennas. Integral on 6 GHz. Includes (2) ML-2452-APA2-02 & AH-ACC-BKT-AX - TB mounting bracket. Domain: Israel

Technical Specifications

The AP3020/X supports both 802.3at PoE and 802.3af PoE.

Note
802.3at PoE is required for 5W USB.

For more information about the technical specifications, see the AP3020/X data sheets found here.

Important
South Korea, Mexico, Taiwan, and Brazil require the use of CAT6 shielded cable.

Physical Dimensions

The AP3020/X has the following dimensions and weight:

- Dimensions
  - AP3020: 16.5 × 16.5 × 4.0 cm (6.50 × 6.50 × 1.58 in.)
  - AP3020X: 23.6 × 24.3 × 4.3 cm (9.29 × 9.57 × 1.69 in.)
- Weight:
  - AP3020: 0.64kg (1.41lb)
  - AP3020X: 0.65kg (1.44lb); Weight with four antennas: .702kg (1.55lb)

Environmental Specifications

The following list shows the environmental operating conditions for the AP3020/X:

- Operating:
  - AP3020: 0°C to +50°C (32°F to 122°F)
  - AP3020X: –20°C to +50°C (–4°F to 122°F)
- Storage:
  - AP3020: –40°C to +70°C (–40°F to 158°F)
  - AP3020X: –40°C to +70°C (–40°F to 158°F)
- Humidity (Operational and storage):
  - AP3020: 0% to 95% (non-condensing)

- AP3020X: 0% to 95% (non-condensing)

Radios

The AP3020/X is supported on both ExtremeCloud IQ and ExtremeCloud Controller.

Both APs have an indoor dual radio design with two 2x2 radios. They also have a dedicated sensor, and two Internet of Things (IoT) radios (5 GHz and 6 GHz; Thread and Zigbee ready, Bluetooth 5.4 Low Energy, IEEE 802.15.4).

The AP3020 can be operated in one of four software modes:

Table 5: AP3020 Operating Modes

Operational Mode	Radio 1	Radio 2
Mode 1	2.4 GHz Full	5 GHz Full (5.15–5.85 GHz)
Mode 2	6 GHz Full (5.945 GHz–7.125 GHz) Low Power Indoor (LPI); Standard Power (SP).	5 GHz Full (5.15–5.85 GHz)
Mode 3	5 GHz Low (5.15–5.35 GHz)	5 GHz High (5.5–5.85 GHz)
Mode 4 **AP3020 only**	6 GHz Full (5.945 GHz–7.125 GHz) Low Power Indoor (LPI); **Standard Power (SP) is not available.**	2.4 GHz Full

The AP3020X can be operated in one of three software modes:

Table 6: AP3020X Operating Modes

Operational Mode	Radio 1	Radio 2
Mode 1	2.4 GHz Full	5 GHz Full (5.15–5.85 GHz)
Mode 2	6 GHz Full (5.945 GHz–7.125 GHz) Low Power Indoor (LPI); Standard Power (SP).	5 GHz Full (5.15–5.85 GHz)
Mode 3	5 GHz Low (5.15–5.35 GHz)	5 GHz High (5.5–5.85 GHz)

Antenna Gain

The following table shows the antenna gain for the AP3020. Use this information when you plan your installation.

Table 7: AP3020 Antenna Gain

Operational Mode	Radio 1	Radio 2	IoT Radio 1	IoT Radio 2
Mode 1	2.4 GHz–5.4dBi	5 GHz–5.8dBi	4.5 dBi	4.5 dBi
Mode 2	6 GHz–4.4dBi	5 GHz–5.8dBi	4.5 dBi	4.5 dBi

Table 7: AP3020 Antenna Gain (continued)

Operational Mode	Radio 1	Radio 2	IoT Radio 1	IoT Radio 2
Mode 3	5 GHz–4.5dBi	5 GHz–5.8dBi	4.5 dBi	4.5 dBi
Mode 4	6 GHz–4.4dBi	2.4 GHz–5.9dBi	4.5 dBi	4.5 dBi

Antenna gain for the AP3020X depends on the external antenna you choose. The following table lists the antenna gain for the integrated antennas and the ML-2452-APA2-02, which is included with the AP3020X. Use this information when you plan your installation.

Table 8: AP3020X Antenna Gain

Operational Mode	Radio 1	Radio 2	IoT Radio 1	IoT Radio 2
Mode 1	2.4 GHz–3dBi (ML-2452-APA2-02)	5 GHz–5dBi (ML-2452-APA2-02)	3.2dBi	5.8 dBi
Mode 2	6 GHz–.9dBi (Integral antenna)	5 GHz–5dBi (ML-2452-APA2-02)	3.2dBi	5.8 dBi
Mode 3	5 GHz–4.5dBi (Integral antenna)	5 GHz–5dBi (ML-2452-APA2-02)	3.2dBi	5.8 dBi

Power Profiles

The following tables show the power profiles for the radio modes. Use this information to plan for power consumption as you deploy your APs.

802.3af Power Profile

Table 9: AP3020 802.3af Power Profile

Operational Mode	Radio-1	Radio-2	IoT	USB
1 (2.4 GHz/5 GHz	2.4 GHz 17dBm, 2x2	5 GHz 18dBm, 2x2	Yes	No
2 (Dual 5 GHz)	5 GHz-Low 18dBm, 2x2	5 GHz-High 18dBm, 2x2	Yes	No

Table 9: AP3020 802.3af Power Profile (continued)

Operational Mode	Radio-1	Radio-2	IoT	USB
3 (5 GHz/6 GHz)	6 GHz 18dBm, 2x2	5 GHz 18dBm, 2x2	Yes	No
4 (2.4 GHz/6 GHz) (**AP3020 only**) The AP3020X does not support Standard Power (SP) in Mode 4.	6 GHz 18dBm, 2x2	2.4 GHz 18dBm, 2x2	Yes	No

Table 10: AP3020X 802.3af Power Profile

Operational Mode	Radio-1	Radio-2	IoT	USB
1 (2.4 GHz/5 GHz)	AP3020X 2.4 GHz 16dBm, 2x2	5 GHz 18dBm, 2x2	Yes	No
2 (Dual 5 GHz)	5 GHz-Low 18dBm, 2x2	5 GHz-High 18dBm, 2x2	Yes	No
3 (5 GHz/6 GHz)	6 GHz 18dBm, 2x2	5 GHz 18dBm, 2x2	Yes	No

802.3at Power Profile

Table 11: AP3020 802.3at Power Profile

Operational Mode	Radio-1	Radio-2	IoT	USB
1 (2.4 GHz/5 GHz)	2.4 GHz 17dBm, 2x2	5 GHz 18dBm, 2x2	Yes	5W
2 (Dual 5 GHz)	5 GHz-Low 18dBm, 2x2	5 GHz-High 18dBm, 2x2	Yes	5W

Table 11: AP3020 802.3at Power Profile (continued)

Operational Mode	Radio-1	Radio-2	IoT	USB
3 (5 GHz/6 GHz)	6 GHz 18dBm, 2x2	5 GHz 18dBm, 2x2	Yes	5W
4 (2.4 GHz/6 GHz) (**AP3020 only**) The AP3020X does not support Standard Power (SP) in Mode 4.	6 GHz 18dBm, 2x2	2.4 GHz 17dBm, 2x2	Yes	5W

Table 12: AP3020X 802.3at Power Profile

Operational Mode	Radio-1	Radio-2	IoT	USB
1 (2.4 GHz/5 GHz)	2.4 GHz 16dBm, 2x2	5 GHz 18dBm, 2x2	Yes	5W
2 (Dual 5 GHz)	5 GHz-Low 18dBm, 2x2	5 GHz-High 18dBm, 2x2	Yes	5W
3 (5 GHz/6 GHz)	6 GHz 18dBm, 2x2	5 GHz 18dBm, 2x2	Yes	5W

Power Consumption

The AP3020/X has the following power consumption:

- Power draw: 802.3af PoE: Typical 11W, maximum 13W without USB
- Power draw: 802.3at PoE: Typical 17W, maximum 19W with 5W USB load

Radiation Patterns

The following polar diagrams show the antenna radiation patterns for the AP3020 and AP3020X.

AP3020 Radiation Patterns

The following polar diagrams show the antenna radiation patterns for each frequency band.

2.4 GHz Radiation Patterns

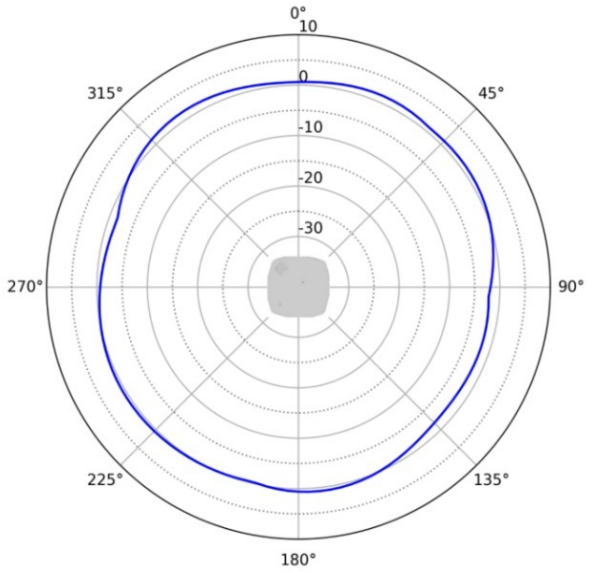


Figure 2: 2.4 GHz Azimuth Mode 1

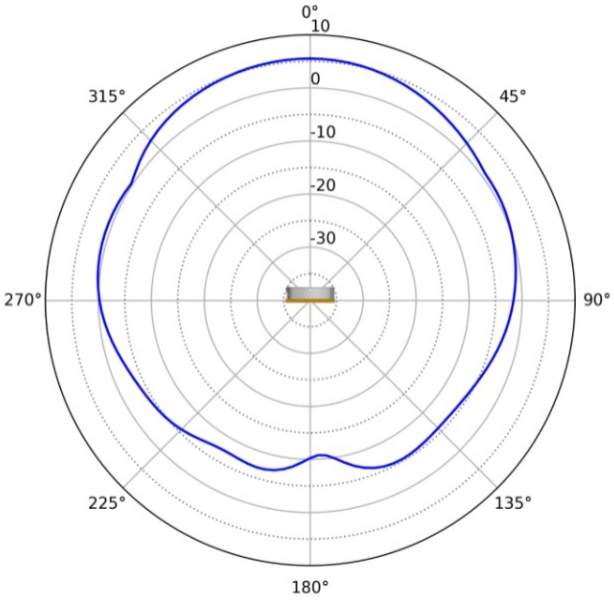


Figure 3: 2.4 GHz Elevation Mode 1

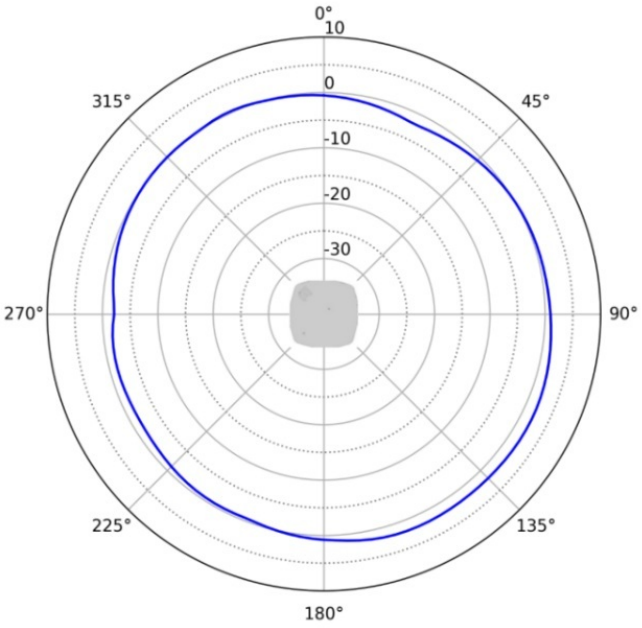


Figure 4: 2.4 GHz Azimuth Mode 4

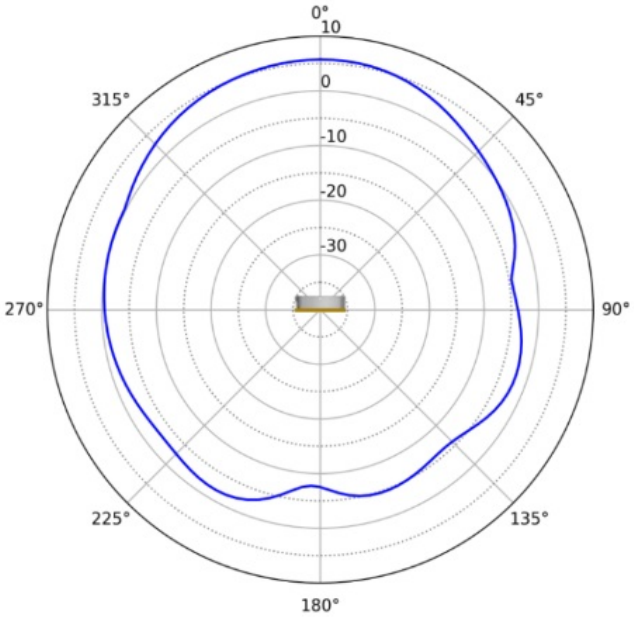


Figure 5: 2.4 GHz Elevation Mode 4

5.0 GHz Radiation Patterns

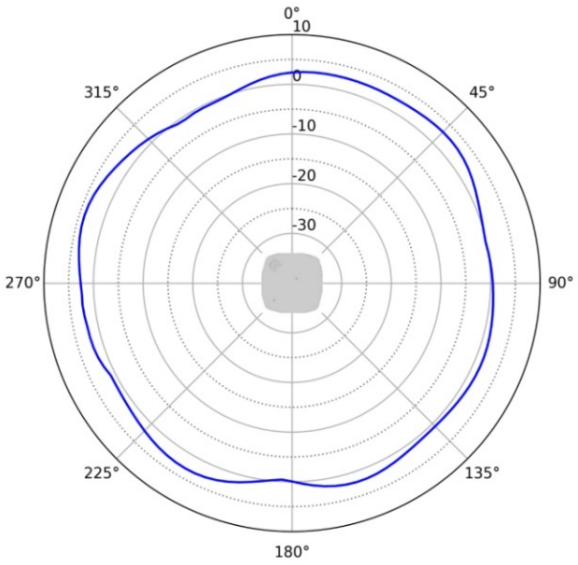


Figure 6: 5.0 GHz Low Azimuth

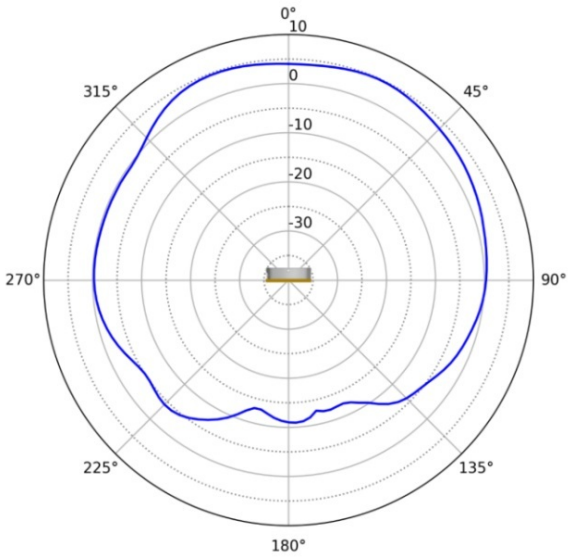


Figure 7: 5.0 GHz Low Elevation

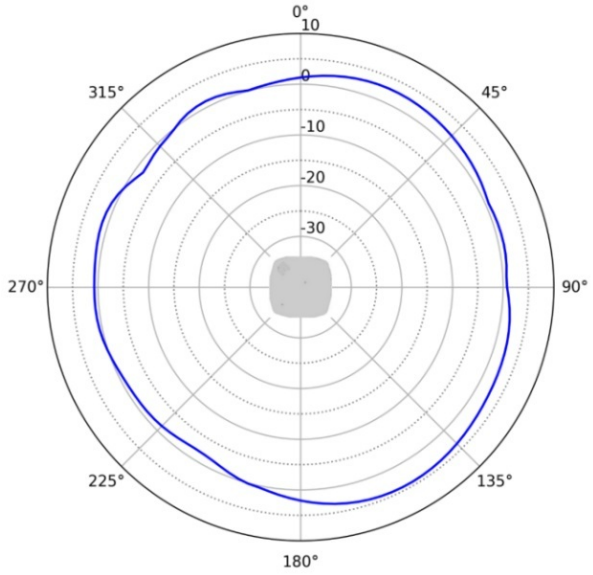


Figure 8: 5.0 GHz Azimuth

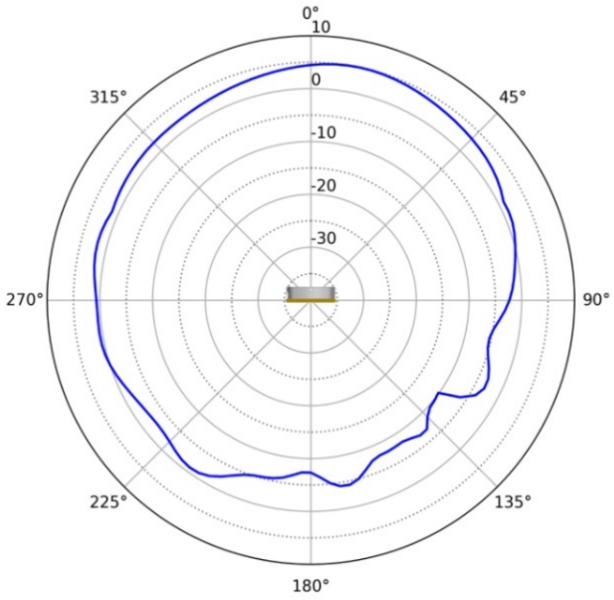


Figure 9: 5.0 GHz Elevation

6.0 GHz Radiation Patterns

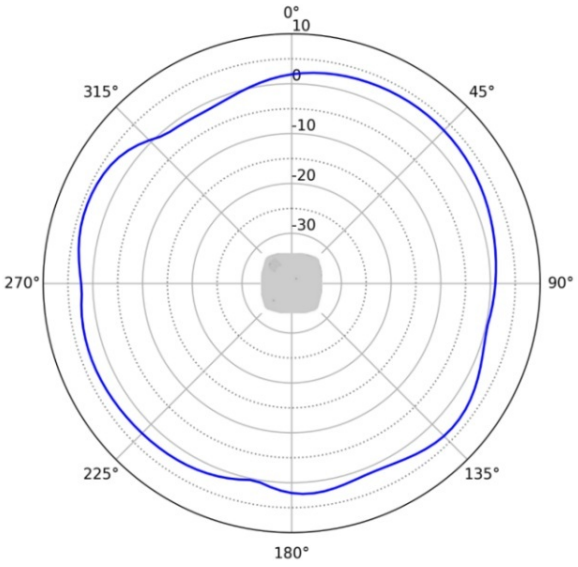


Figure 10: 6.0 GHz Azimuth

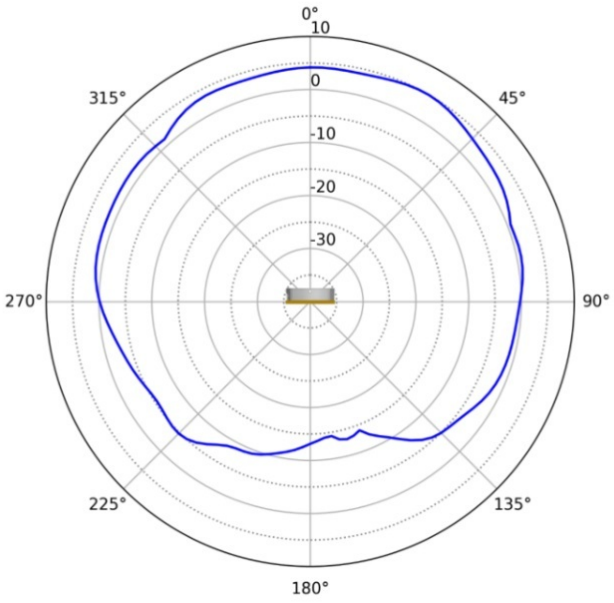


Figure 11: 6.0 GHz Elevation

Bluetooth Low Energy (BLE) Radiation Patterns

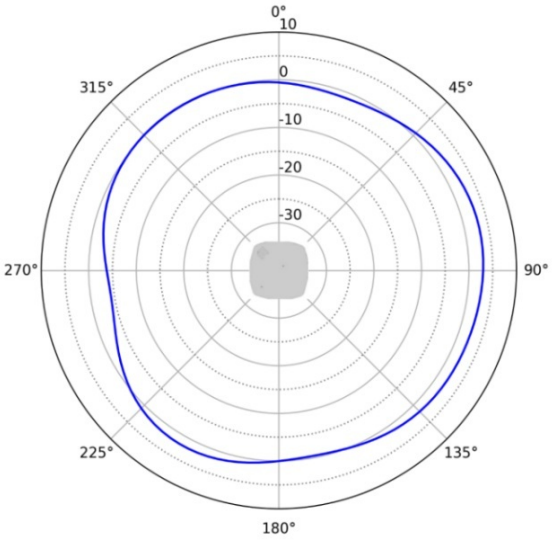


Figure 12: BLE Radio 0 Azimuth

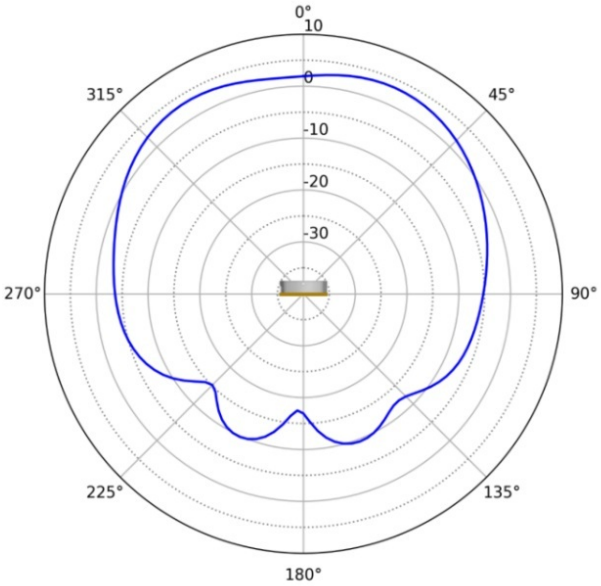


Figure 13: BLE Radio 0 Elevation

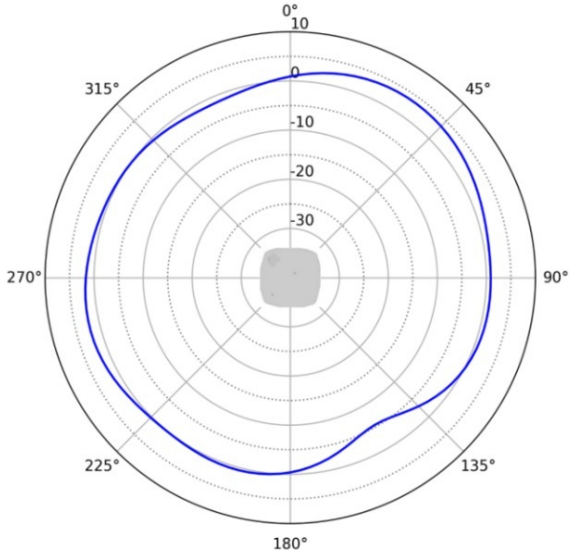


Figure 14: BLE Radio 1 Azimuth

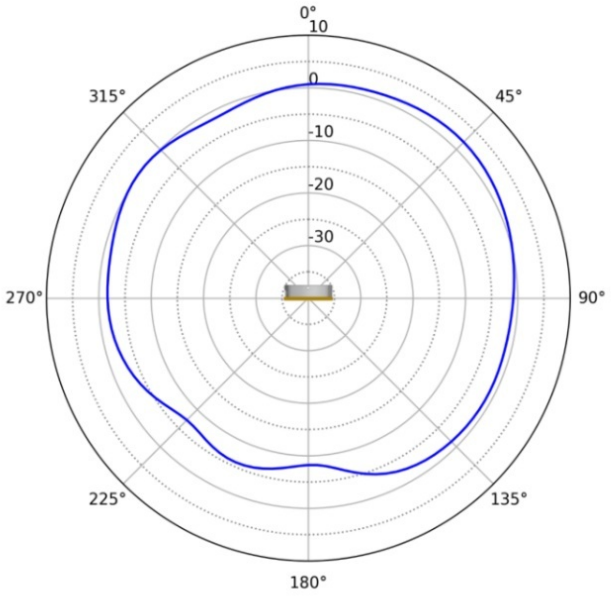


Figure 15: BLE Radio 1 Elevation

AP3020X Radiation Patterns

2.4 GHz Radiation Patterns

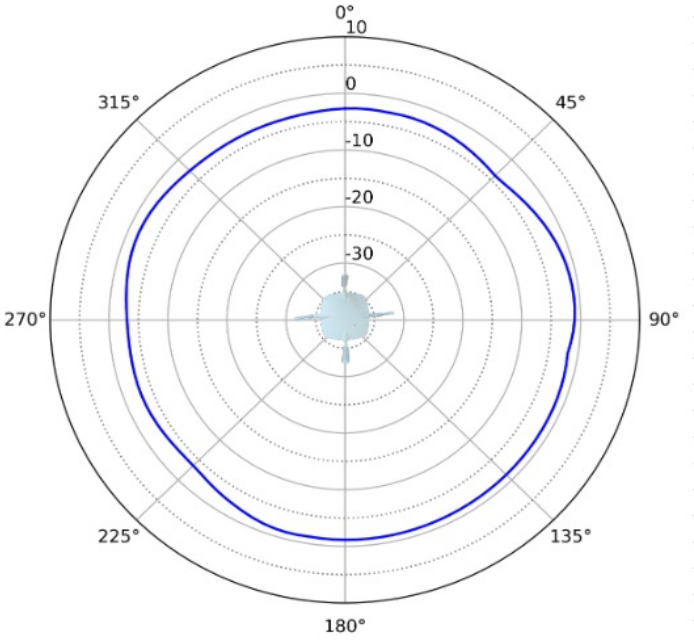


Figure 16: 2.4 GHz Azimuth - ML-2452-APA2-02

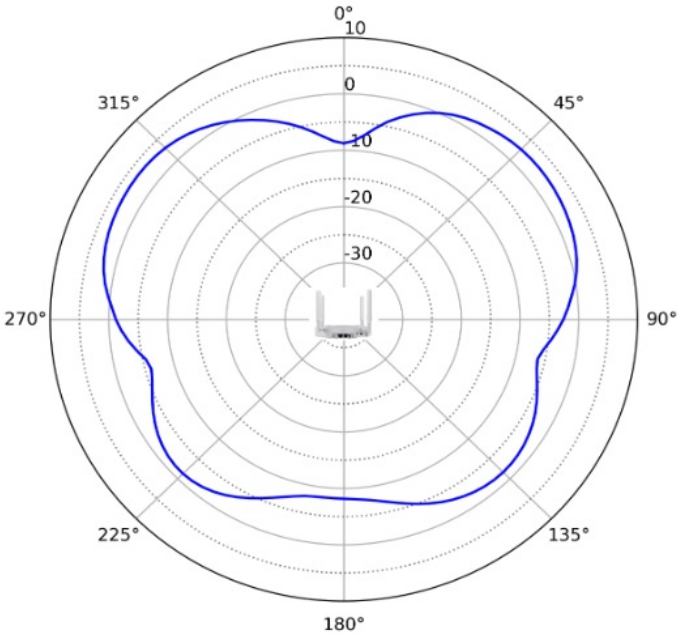


Figure 17: 2.4 GHz Elevation - ML-2452-APA2-02

5.0 GHz Radiation Patterns

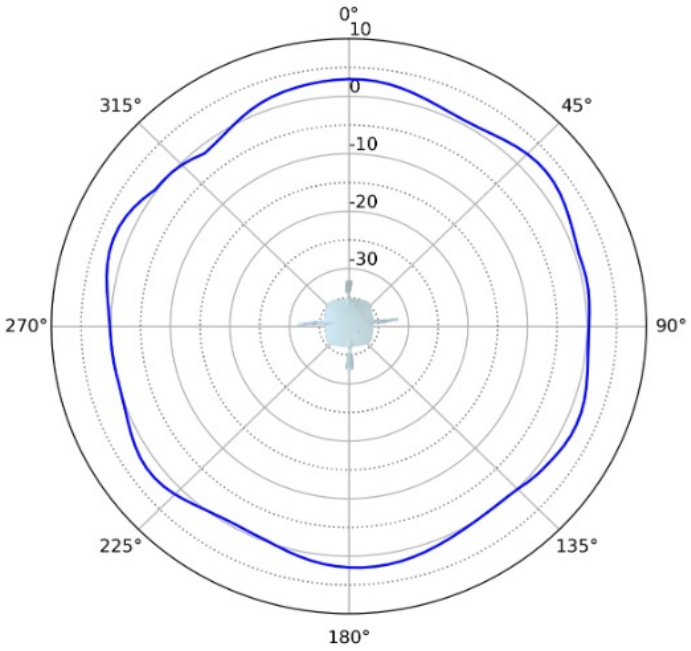


Figure 18: 5.0 GHz Low Azimuth - Integral Antenna

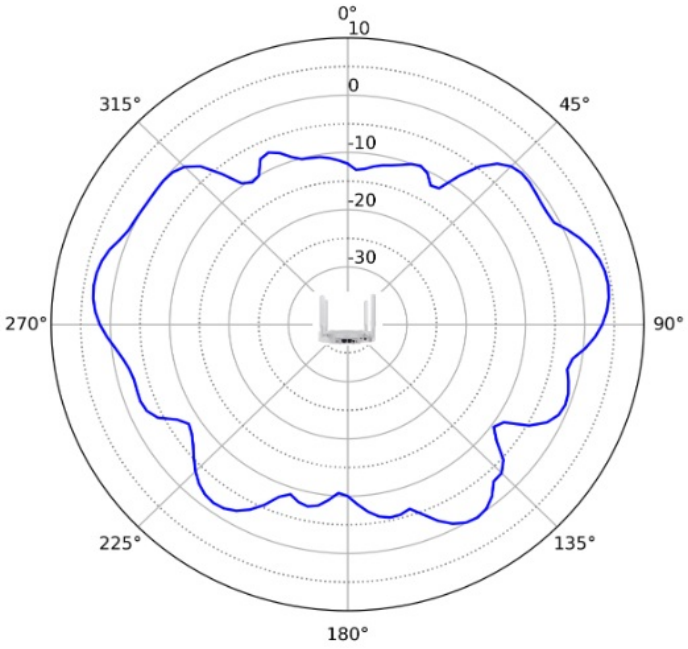


Figure 19: 5.0 GHz Low Elevation - Integral Antenna

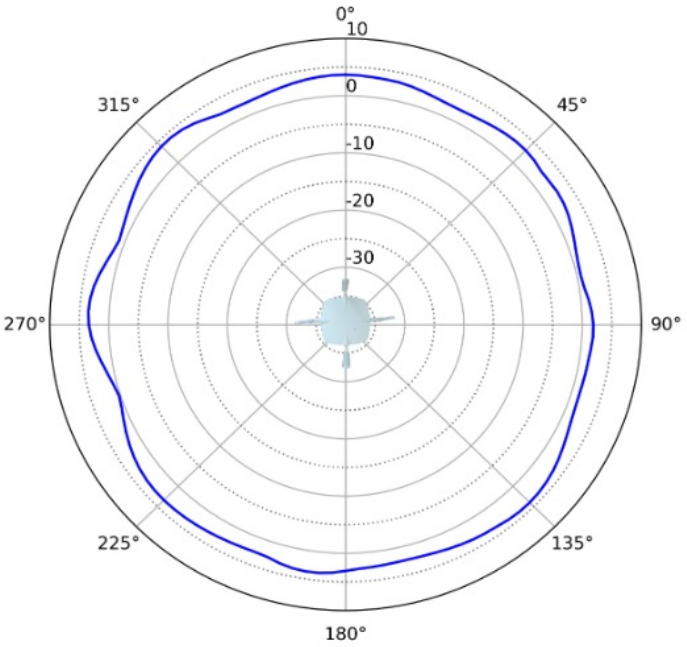


Figure 20: 5.0 GHz Azimuth - ML-2452-APA2-02

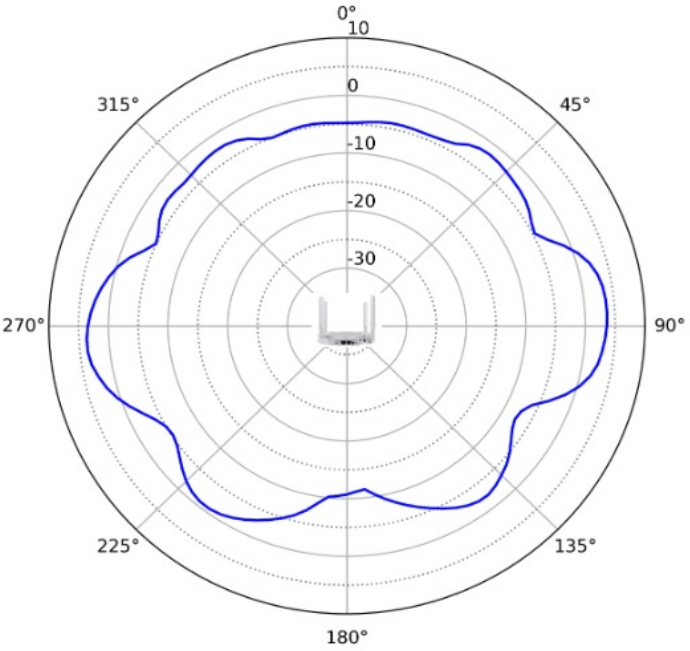


Figure 21: 5.0 GHz Elevation - ML-2452-APA2-02

6.0 GHz Radiation Patterns

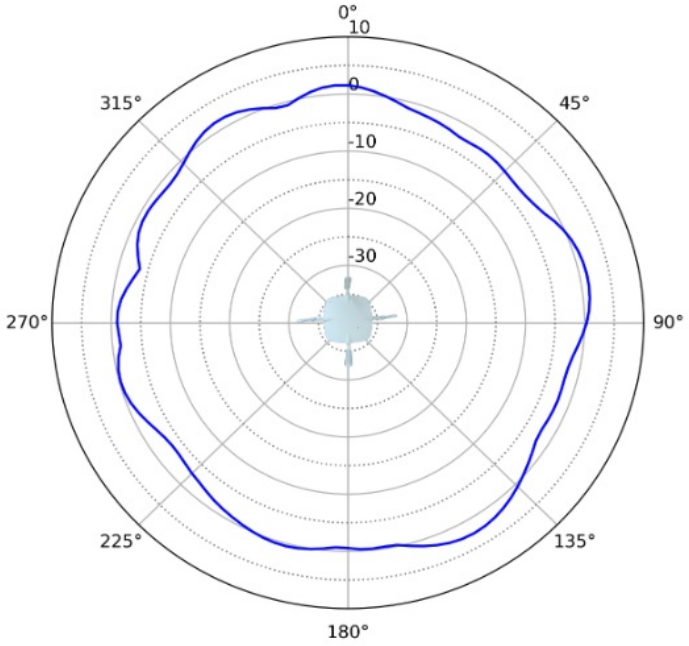


Figure 22: 6.0 GHz Azimuth - Integral Antenna

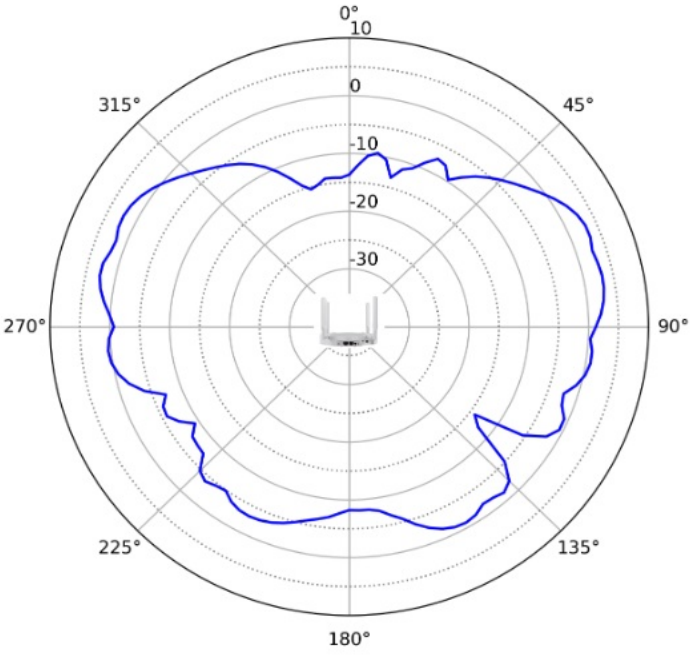


Figure 23: 6.0 GHz Elevation - Integral Antenna

Bluetooth Low Energy (BLE) Radiation Patterns

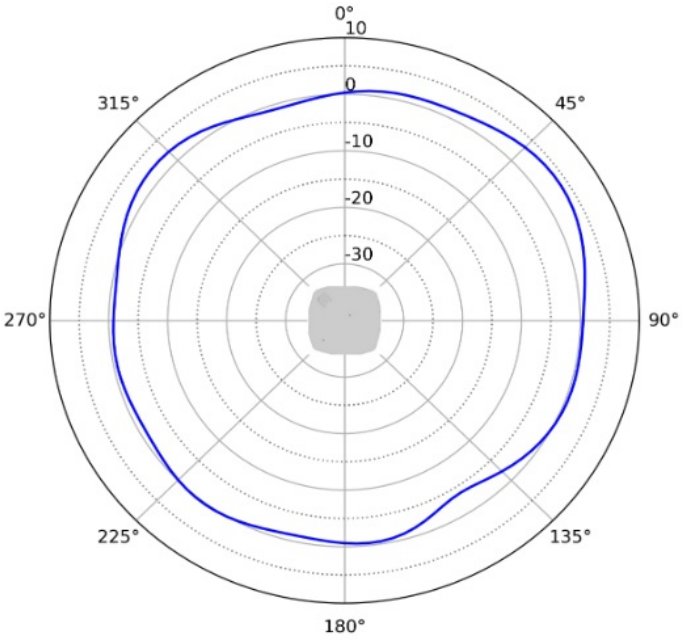


Figure 24: BLE 0 Azimuth - ML-2452-APA2-02

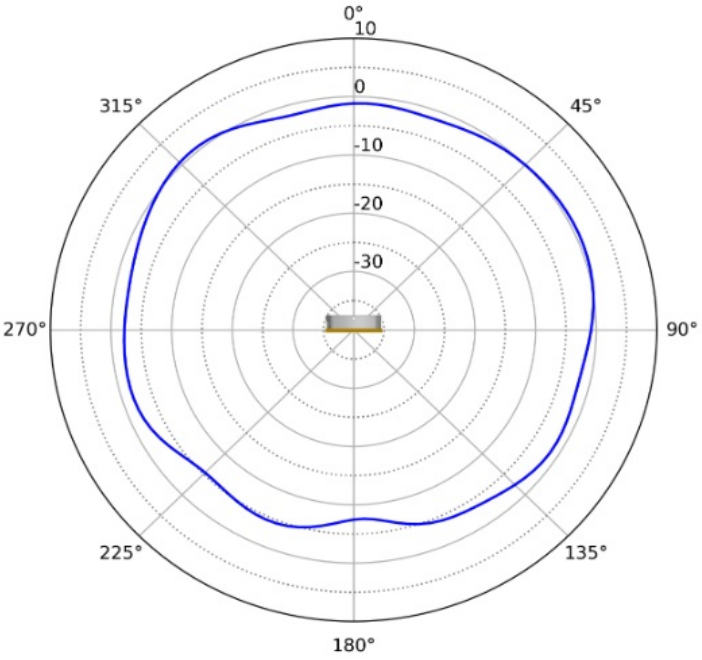


Figure 25: BLE 0 Elevation - ML-2452-APA2-02

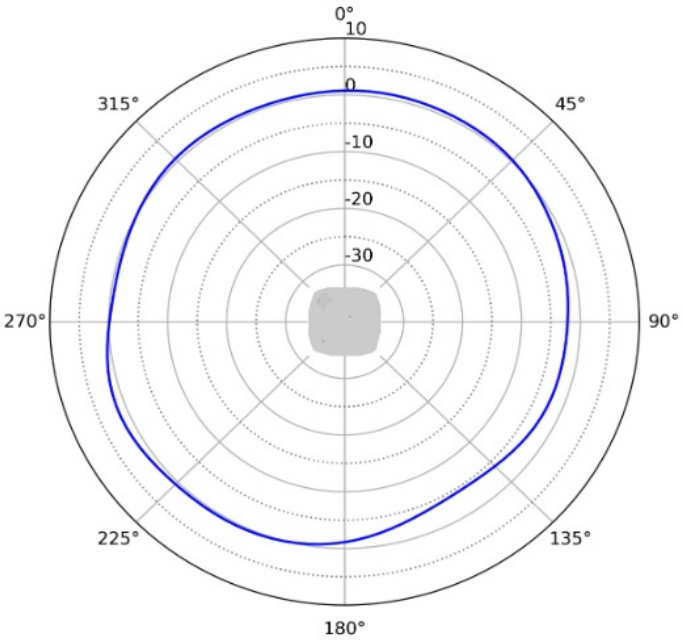


Figure 26: BLE 11 Azimuth - ML-2452-APA2-02

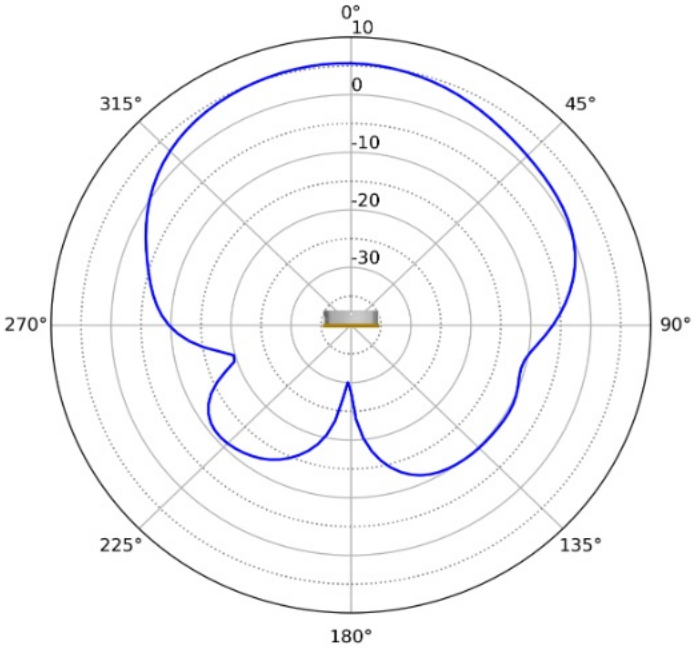


Figure 27: BLE 11 Elevation - ML-2452-APA2-02

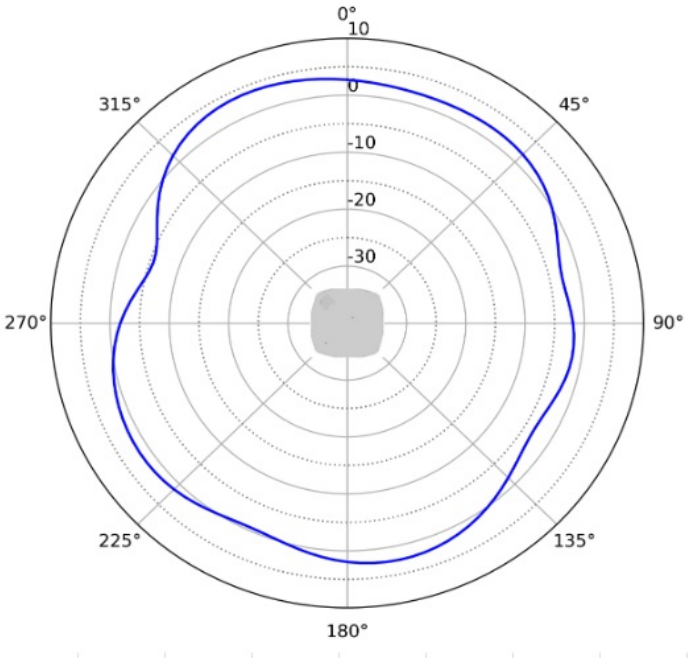


Figure 28: BLE 1 2 Azimuth - ML-2452-APA2-02

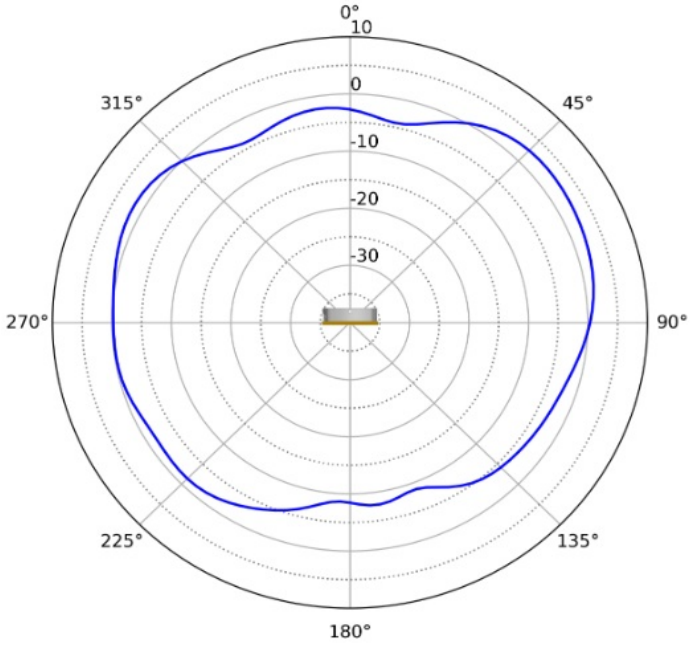


Figure 29: BLE 1 2 Elevation - ML-2452-APA2-02

Hardware Ports

Use the information in the following sections to identify the hardware connectors and ports.

AP3020 Hardware Ports and Connectors

The following graphic and table show the available AP3020 ports.

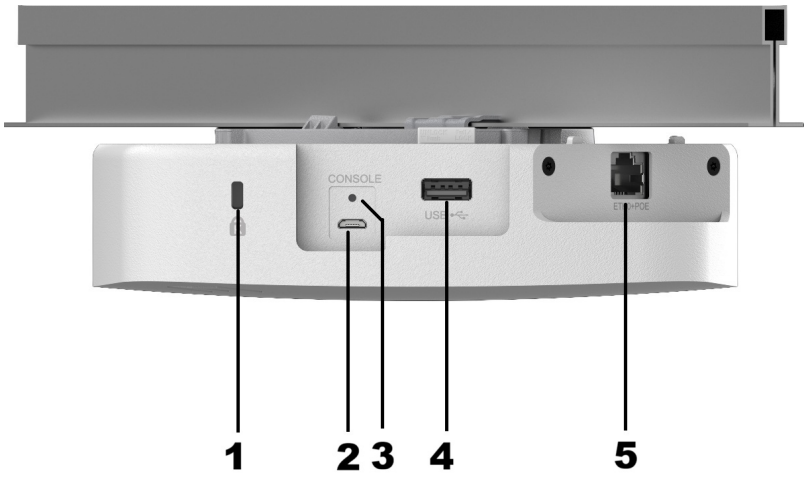


Figure 30: AP3020 Ports

Table 13: AP3020 Ports and Connections

Item	Port	Description
1	Kensington security slot	A security feature that prevents someone from removing the AP. This is an optional task
2	Console port	Micro USB console port for a serial connection between your management system and the access point. Use the port when you troubleshoot the AP. **Tip:** The best practice is to use the Extreme Networks micro USB cable (ACC-WIFI-MICRO-USB). When you connect to the device, the management station must have a VT100 emulation program, such as the terminal emulator TeraTerm Pro or Hilgraeve HyperTerminal. Set your baud rate to 115200. **Caution:** The console port can only be used with the Extreme Networks console cable. You could damage the AP if you use another cable.
3	Reset button	Perform a reboot or factory reset.

Table 13: AP3020 Ports and Connections (continued)

Item	Port	Description
4	2.0 USB Type A, 5V/1A with PoE 802.3at.	Used with a thumb drive or other external device. The USB port has a locking mechanism that prevents devices plugged into the port from being dislodged.
5	ETH0/PoE port	Ethernet port with RJ45 connectors: • ETH0: 100/1,000/2,500 Mbps auto-sensing link speed Ethernet port, PoE PD. • 802.3az Energy-Efficient Ethernet (EEE).

AP3020X Hardware Ports and Connectors

The following graphic and table show the available AP3020X ports and connectors.

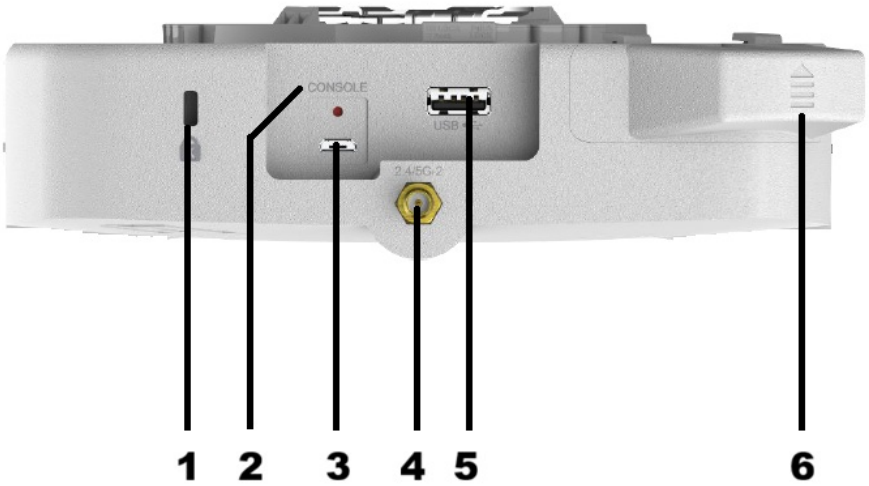


Figure 31: AP3020X Ports and Connectors

Table 14: AP3020X Ports and Connections

Item	Port	Description
1	Kensington security slot	A security feature that prevents someone from removing the AP. This is an optional task.
2	Reset button	Perform a reboot or factory reset.

Table 14: AP3020X Ports and Connections (continued)

Item	Port	Description
3	Console port	Micro USB console port for a serial connection between your management system and the access point. Use the port when you troubleshoot the AP. **Tip:** The best practice is to use the Extreme Networks micro USB cable (ACC-WIFI-MICRO-USB). When you connect to the device, the management station must have a VT100 emulation program, such as the terminal emulator TeraTerm Pro or Hilgraeve HyperTerminal. Set your baud rate to 115200. **Caution:** The console port can only be used with the Extreme Networks console cable. You could damage the AP if you use another cable.
4	External antenna port	The AP3020X has two 2.4/5 GHz ports for external antennas. Not shown: The AP3020X also has two fixed, integral antennas (5/6 GHz).
5	2.0 USB, Type A, 5V/1A with PoE 802.3at.	Used with a thumb drive or other external device. The USB port has a locking mechanism that prevents devices plugged into the port from being dislodged.
6	Ethernet port with cap.	Ethernet port with RJ45 connectors: • ETH0: 100/1,000/2,500 Mbps auto-sensing link speed Ethernet port, PoE PD. • 802.3az Energy-Efficient Ethernet (EEE). A standard Ethernet cable can be used if you want the cable visible. A flat cable and a cable cap are required if you want to hide the Ethernet cable.

AP3020X Antenna Ports

The following graphic and table show the antenna ports on the AP3020X.

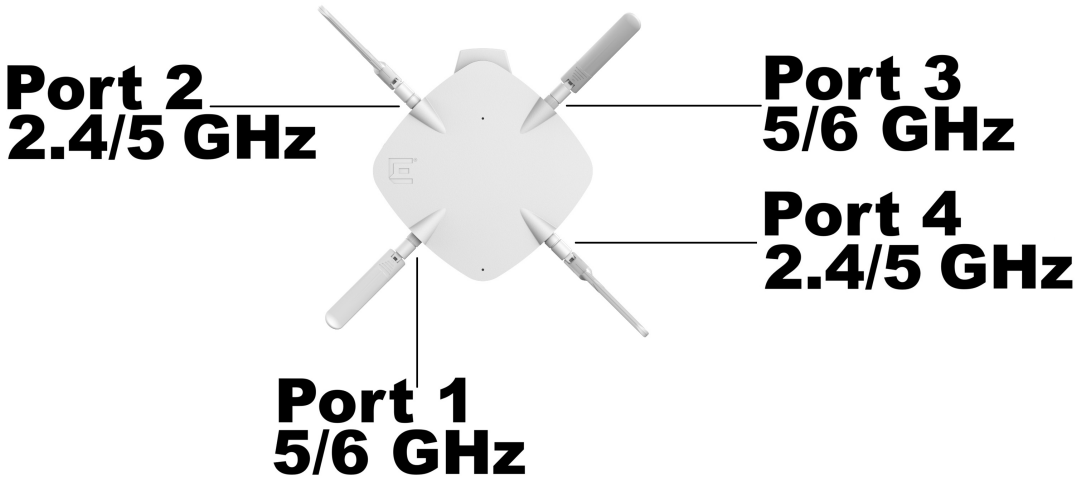


Figure 32: AP3020X Antenna Ports

Table 15: AP3020X Antenna Ports and Labels

Antenna Ports	Description
1	External integral-type antenna Dual frequency: 5 GHz-Low and 6 GHz-Full Label: 5/6G-1
2	External RP-SMA antenna connector Dual frequency: 2.4 GHz-Full and 5 GHz-Full Label: 2.4G/5G-2
3	External integral-type antenna Dual frequency: 5 GHz-Low and 6 GHz-Full Label: 5/6G-3
4	External RP-SMA antenna connector Dual frequency: 2.4 GHz-Full and 5 GHz-Full Label: 2.4G/5G-4

LED Descriptions

The LED status light shows the operating status of the AP. A solid white means that the AP is working correctly. A solid or blinking amber indicates an issue.

The following tables show the LED states based on your firmware platform.

Table 16: ExtremeCloud IQ LED Activity

Status	Activity
Dark	Power is off.
Solid white	The device power is on and the AP is ready to use. The device has successfully established a Control and Provisioning of Wireless Access Points (CAPWAP) connection to ExtremeCloud IQ and is operating correctly.
Solid amber	The power is on and the AP is in starting up, or is running without a CAPWAP connection.
Fast-blinking amber	The IQ Engine firmware is updating.

Table 17: ExtremeCloud IQ Controller LED Activity

Status	Activity
Dark	Power is off or the AP is taken over by the controller. Configuration pushes down to AP from controller to turn off the LED.
Solid white	The AP is starting up or is already taken over by the controller.
Flashing fading white	The flashing white LED helps you locate the AP.
Solid amber	A firmware upgrade is occurring
Fast-blinking amber	The AP is acquiring the DHCP IP.

Accessories

The AP3020/X comes with the AH-ACC-BKT-AX-TB mounting bracket that can be used to mount the access point on flat t-bar ceiling grids and flat surfaces, such as Prelude ceilings (15/16 in. ceiling grid), Suprafine ceilings (flat bottomed 9/16 in. ceiling grid), and walls. The ceiling tile sides must be flat without a step on the edges.

Antennas

The following table lists the supported antennas for AP3020X.

Table 18: Supported Antennas

Antenna	Description
ML-2452-APA2-02	Dipole, 3.2dBi (2.4 GHz) and 4.9dBi (5 GHz) dual band with RP-SMA connector, color: White Included with the AP3020X.
AIO-DD75060-RPSMA	Panel, 60 deg sector, 7.5dBi (2.4 GHz) and 7.5dBi (5 GHz), dual band 36 inch lead with 2 RP-SMA connectors, outdoor rated
AIO-DD05120-RPSMA	Panel, 120 deg sector, 5dBi/5dBi, dual band, outdoor, 36 inch lead with 2 RP-SMA connectors
AIO-DD15020-RPSMA	15 dBi Indoor/Outdoor Four - port, 2.4 GHz and 5 GHz, Directional 21 Degree with 36 inch RPSMA cable, mount included

Table 18: Supported Antennas (continued)

Antenna	Description
ML-2452-SEC6M4-036	Polarized Panel, Azimuth 100° Elevation Beam width 80 deg, 6.92dBi/ 7.3dBi, dual band, indoor 32" leads, 4 port RP-SMA plug connectors
AI-TQ08055	8dBi Indoor Quad Sector 2.4GHz 65 Degrees and 5GHz 55 Degrees Tri-band with 4 port RP-SMA
AI-TQ06120	6dBi Indoor Quad Sector 120 Degree Tri-band with 4 port RP-SMA
AI-DP04360S	Dipole Omni Array, 5.5dBi/6dBi, dual band, outdoor with quad feed 36 inch leads and RP-SMA connectors

Mounting Accessories

The following table lists the supported mounting accessories. For more information, see the *Wi-Fi6 11ax Accessories Installation Guide*.

Table 19: Supported Mounting Accessories

Item	Description
AH-ACC-BKT-AX-TB	Mounting bracket that can be used to mount the access point on flat surfaces such as Prelude ceilings (15/16 in. ceiling grid), Suprafine ceilings (flat bottomed 9/16 in. ceiling grid), and walls. **Note:** AH-ACC-BKT-AX-TB is included with the access point.
AH-ACC-BKT-AX-IL	Mounting bracket for Interlude ceilings (9/16 in. wide T-bar with center protrusion and has less than 1/4 inch between the wall and the access point).
AH-ACC-BKT-AX-SL	Mounting bracket for Silhouette ceilings (ceiling grid with 1/8 in. or 1/4 in. bottom opening).
AH-ACC-BKT-AX-WL	Mounting bracket for direct-to-wall installations when a 1.25 in. of space is desired between the wall and the access point.
ACC-BKT-TB-NF	Mounting bracket for 15/16 in. wide T-bars with sculpted ceiling tiles.
AH-ACC-BKT-916-KIT	Mounting bracket for 9/16 in. wide T-bars with sculpted ceiling tiles.
ACC-BKT-AX-BEAM	Mounting bracket for beam mounting.
ACC-BKT-AX-JB	Mounting bracket for junction box or wall mounting.
ACC-BKT-AX-WNGADAPT	Adapter bracket for Cloud AP to WiNG Mounting Plate (#37201). Ships in a pack of 10.
ACC-BKT-AX-TBW	Mounting bracket for 1.5 in wide extruded T-Bars with flat ceiling tiles.

Power Accessories

You can power the access point through the ETH0 RJ45 Ethernet port.

Table 20: Power Accessories

Part Number	Description
PD-9001GR-ENT	Single Port 802.3at Compliant Midspan
10033	Pwr Cord,10A,CEE 7/7,IEC320-C13,250V, 0.75MMSQ (for EU and Korea)
10034	Pwr Cord,10A,BS1363,IEC320-C13,250V, 0.75MMSQ (for UK)
10036	Pwr Cord,10A,AS3112,IEC320-C13,250V, 0.75MMSQ (for AU)
10061	Pwr Cord,10A,NEMA 5-15P,IEC320-C13,125V, 18AWG (for US)
10062	Pwr Cord,12A,JISC8303,IEC320-C13,125V, 1.25MMSQ (for Japan)

Other Accessories

The following table shows the additional accessories available for your access point.

For more information, see the *Wi-Fi6 11ax Accessories Installation Guide*.

Table 21: Other Supported Accessories

Part Number	Description
ACC-WIFI-MICRO-USB	Extreme Networks micro USB cable. **Caution:** The console port can only be used with the Extreme Networks console cable. You could damage the AP if you use another cable. **Note:** When you connect to the micro-USB console port, the management station from which you connect to the device must have a VT100 emulation program, such as TeraTerm Pro (a free terminal emulator) or Hilgraeve HyperTerminal (provided with Windows operating systems from XP forward).

Security

The AP3020/X supports Wi-Fi Alliance WPA3 security certifications. Use Extreme Fabric Attach for provisioning and deployment to a Fabric Connect-enabled switch. The access point also supports the following security features:

- A L2-L7 DPI firewall
- Tri-frequency security

- Private Pre-Shared Key (PPSK) for Cloud deployment
- Location analytics sensor

Cleaning Guidelines

You can clean your AP with the following solutions:

- Hydrogen peroxide (a 3% solution)
- Chlorine bleach
- Sodium hypochlorite (a 0.05% solution)
- Ethyl alcohol (a 75% solution)
- Isopropyl alcohol (a 75% solution)
- White vinegar
- Sporicidal (peracetic acid; a 0.5% solution)
- Water
- Baking soda (a 3:1 solution)
- Non-abrasive soap



Caution

Do not wash or immerse the AP in a liquid as you will damage the device and void the warranty. Instead, wipe the plastic housing, also called the radome, with a damp cloth avoiding the ports and connectors.

Do not power wash the AP.

Install the Access Point

Preinstallation Tasks on page 41
Installation Workflow on page 42
Box Contents on page 44
Antenna Connectors on page 45
Connect the AP3020X Antennas on page 47
Position the Access Point Before Installation on page 47
Install the Access Point on a Standard Flat Ceiling Rail with Sculpted Ceiling Tiles on page 48
Nonstandard Ceiling Grid or Wall Installation on page 51
Install the Access Point on a Wall with AH-ACC-BKT-AX-WL on page 56
Install the Access Point on a Silhouette Ceiling on page 57
Install the Access Point on a 9/16-inch T-bar on page 59
Install the Access Point on a 15/16-inch T-bar on page 62
Install the Access Point on a Beam on page 65
Install the Access Point on a Junction Box on page 66
(Optional) Lock the Access Point on page 70
Install an AP Using the WNGADAPT Bracket on page 70
Onboard the Access Point with the ExtremeCloud IQ Mobile Onboarding App on page 73
Troubleshoot the AP on page 73

Preinstallation Tasks

Complete the following tasks before installation to simplify deployment.

Important

Before you install your AP, read the deployment and onboarding information in ExtremeCloud IQ Controller Deployment Guide for on-premises deployments or the Extreme Platform ONE Networking User Guide for a Cloud deployment.

Extreme Networks devices, including access points, require firmware updates to ensure optimal performance and security. During deployment, upgrade your APs to the latest firmware.

Site Survey

Before you install your AP, do a site survey and coverage map so that you can identify and address potential issues.

Answer the following questions before you install the AP:

- What is the the purpose of the WLAN?
- Which applications do users run over the WLAN?
- Who will use the WLAN?
- What devices will be connecting to the WLAN?
- Are there any mounting or aesthetic restrictions?

Consider the following items as you plan your deployment:

- Capacity and coverage requirements
- Existing issues such as coverage gaps
- Existing networks or devices that can interfere with your network
- Interference from floors above and below, or from outside sources such as nearby office buildings

For more information on site surveys, see the Knowledge Base article What is Wireless Site Survey and why is it important?.

Verify Network and Power Requirements

Perform the following tasks:

- If you plan to use Power over Ethernet (PoE), confirm that it meets requirements of the AP. See Power Profiles.
- Document the switch and ports used by the AP with LLDP protocol.
- Confirm cables meet or exceed the required specifications.
- Check that the AP power turns on correctly.

Installation Workflow

An AP joins your network automatically when your network meets the DHCP and DNS prerequisites. But you can save time and configure the AP before you install it with the pre-provision mode. You can revert the AP to production mode when you are ready for deployment.

For more information on deployment, see the Knowledge Base article How to deploy a new Access Point or replace a faulty Access Point to your ExtremeCloud IQ Controller. AP

deployment is also documented in ExtremeCloud IQ Controller documentation and the IQ Engine documentation.

Important

Before you install your AP, read the deployment and onboarding information in ExtremeCloud IQ Controller Deployment Guide for on-premises deployments or the Extreme Platform ONE Networking User Guide for a Cloud deployment.

Extreme Networks devices, including access points, require firmware updates to ensure optimal performance and security. During deployment, upgrade your APs to the latest firmware.

Caution

Do not stack APs on top of each other during onboarding or configuration. This can cause heat to build up between the APs, damage the radomes, and void the warranty.

Note

Confirm that Domain Name System (DNS), Network Time Protocol (NTP), and the firewall ports are configured and available before deployment. Create a firewall rule to allow outbound traffic from Extreme Networks devices. For more information about firewalls, see Firewall Configuration Guides.

As a best practice, configure the DHCP options on your DHCP server to assign an allowed NTP server to Extreme Networks devices. Both DNS and NTP are critical for country and region detection and certificate validation. For more information about DNS and NTP, see *ExtremeCloud IQ Controller Deployment Guide* for Cloud deployment and *Extreme Campus Controller Deployment Guide* for Campus or on-premises deployment.

Use the information in the following table to help you install your access point.

Table 22: Installation Workflow

Steps	Action	Purpose
1	Verify the box contents.	Confirm that your AP and accessories arrived complete and undamaged.
2	Install the access point to one of the following: • Wall • Standard ceiling • Nonstandard ceiling or wall • Silhouette ceiling • Interlude ceiling • 15/16-inch T-bar • Junction Box • Beam • WNGADAPT Bracket	Install the AP on a ceiling or wall, and connect the network cable. If you use Power over Ethernet (PoE), the AP turns on. The AP begins a discovery process to determine its own IP address and the IP address of the controller. When the discovery process is successful, the AP registers with the controller. For more information, see the following articles: • Access points failing the Wireless Controller discovery process • How to Onboard, Switch, and Troubleshoot the Universal AP modes between IQE (ExtremeCloud IQ Engine) and WiNG modes?
3	(Optional) Lock the access point.	Secure the AP and prevent someone from removing it.
4	(Optional) Onboard the AP with the ExtremeCloud IQ Mobile Onboarding application.	Scan the QR code or bar code on the back of the device and begin the onboarding process.
5	Confirm that the LED is white.	A white LED indicates that your AP has started and registered with the Cloud. An amber light indicates a technical issue that requires a resolution. For an explanation of the LED states, see LED Descriptions.

Box Contents

Your Extreme Networks access point ships with everything that you need for a basic installation. You purchase all optional brackets and accessories separately.

Confirm that you have received the following items before you install your device.

Table 23: Hardware

Quantity	Item
1	AP3020/X Extreme Networks access point
1	Regulatory document for your access point

Table 23: Hardware (continued)

Quantity	Item
1	AH-ACC-BKT-AX-TB mounting bracket
2	Phillips pan-head wood screws
2	Phillips head plastic screw-in anchors
2	ML-2452-APA2-02 antennas
1	Ethernet port cap. Keep this item. You cannot order a replacement.

Antenna Connectors

Connect each antenna lead to the correct antenna port on the AP. Use the following table as a guide when you connect your antennas.

Note
Ports 1 and3 have fixed, integral antennas that cannot be removed. Port 2 and 4 are for optional external antennas.

The following graphic and table show the antenna ports on the AP3020X.

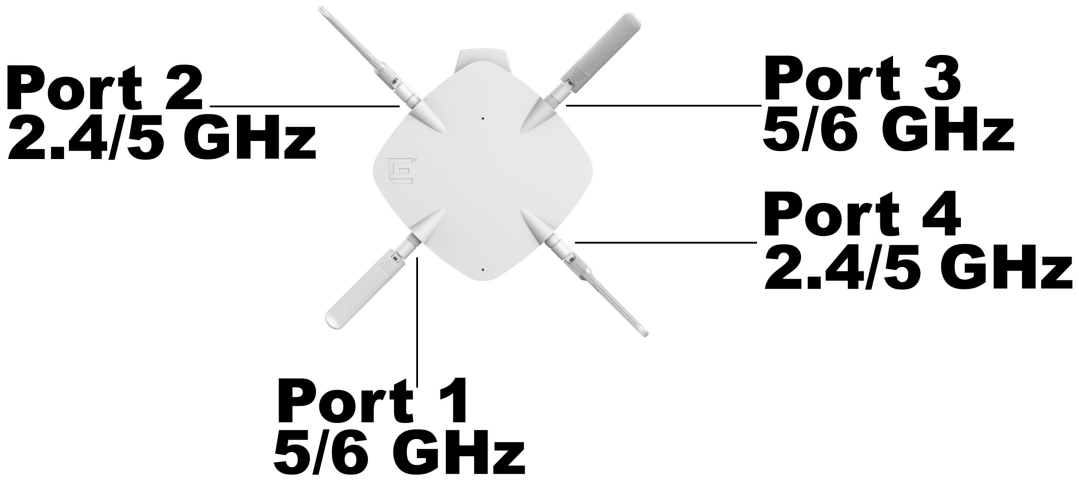


Figure 33: AP3020X Antenna Ports

Table 24: Antennas and Corresponding Ports

Antenna Part Number	AP3020X Ports			
	Antenna Port 1 (6GHz)	Antenna Port 2 (2.4/5GHz)	Antenna Port 3 (6GHz)	Antenna Port 4 (2.4/5GHz)
ML-2452-APA2-02 (1 lead available)	N/A	Connect the antenna lead to any available port	N/A	Connect the antenna lead to any available port
AIO-DD75060-RPSMA (2 leads available)	N/A	Connect lead Antenna#2: Left to port 2	N/A	Connect lead Antenna#1: Right to port 4
AIO-DD05120-RPSMA (2 leads available)	N/A	Connect lead Antenna#2: Left to port 2	N/A	Connect lead Antenna#1: Right to port 4
ML-2452-SEC6M4-036 (4 leads available; use 2 leads only)	N/A	Connect lead "+45" to port 2	N/A	Connect lead "-45" to port 4
AI-TQ08055 (4 leads available; use 2 leads only)	N/A	Connect lead 1/A V-Pol to port 2	N/A	Connect lead 2/B H-Pol to port 4
AI-TQ06120 (4 leads available; use 2 leads only)	N/A	Connect lead 1/A V-Pol to port 2	N/A	Connect lead 2/B H-Pol to port 4
AIO-DD15020-RPSMA (2 leads available; use 2 leads only)	N/A	Connect lead 1/A V-Pol to port 2	N/A	Connect lead 2/B H-Pol to port 4
AI-DP04360S	N/A	Connect the antenna lead to any available port	N/A	Connect the antenna lead to any available port

The following table maps the operating mode and radio to the active Wi-Fi antenna.

Table 25: AP3020X Operational Modes

Operational Mode	Radio 1	Radio 2
Mode 1	2.4 GHz-Full 16dBm Ports 2 and 4	5 GHz-Full (5.15-5.85 GHz) Ports 2 and 4
Mode 2	6 GHz-Full (5.945 GHz to 7.125 GHz) Low Power Indoor (LPI); Standard Power (SP). Ports 1 and 3	5 GHz-Full (5.15-5.85 GHz) Ports 1 and 3
Mode 3	5 GHz-Low (5.15-5.35 GHz) Ports 2 and 4	5 GHz-High (5.5-5.85 GHz) Ports 2 and 4

Connect the AP3020X Antennas

Before You Begin

Two important points:

- The AP3020X has two *integral* antennas which cannot be removed. An integral antenna is fixed to the AP and cannot be disconnected. It is also called a fixed antenna or integrated antenna.
- The AP3020X also supports two RP-SMA antennas which you can attach to the AP and use to extend your coverage. You can use any of the supported antennas listed in the Antennas section.

About This Task

External antennas extend coverage for the AP3020X. For information on connecting antenna leads to the correct port, read Antenna Connectors.

Procedure

1. Thread the antennas onto the RP-SMA connector.
2. Tighten each antenna to a torque of 0.56 N-m (5 in-lb).
3. Twist all antennas so the bend opening is toward the radome.
4. Rotate each antenna to the 45-degree or 90-degree position for maximum signal strength.

Position the Access Point Before Installation

About This Task

Use the red dot on the back of the access point and the bracket to help you with installation.

Procedure

Line up the red dot on the access point and the bracket for ease of installation.

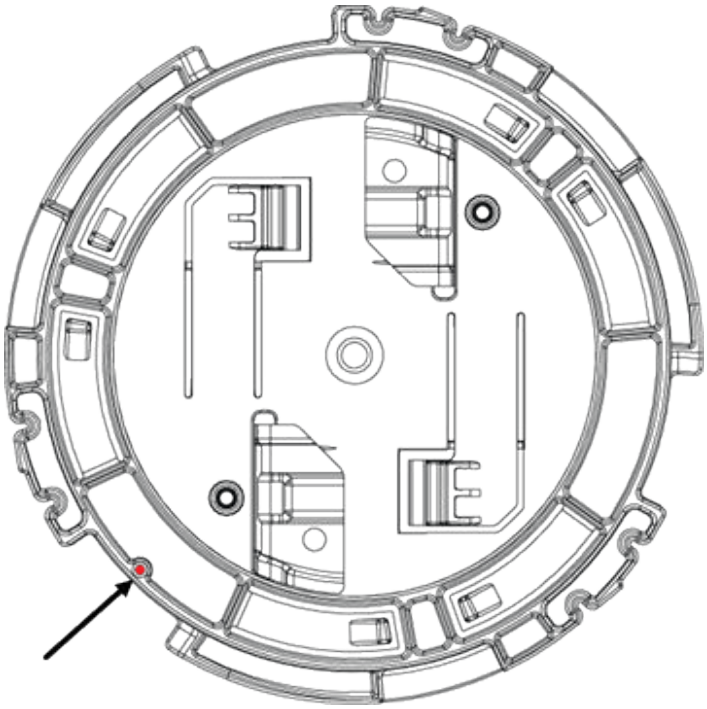


Figure 34: AH-ACC-BKT-AX-TB Bracket Red Dot

Install the Access Point on a Standard Flat Ceiling Rail with Sculpted Ceiling Tiles

Before You Begin

The following hardware is required for a standard ceiling rail installation:

- One AP3020/X
- One AH-ACC-BKT-AX-TB mounting bracket for prelude T-bar ceiling installation, that is shipped with the access point

About This Task

The AP3020/X ships with a mounting bracket for standard 15/16 in. (24mm) wide t-bars or 9/16 in. (14mm) wide t-bar rails. For non-standard ceiling rail installations, see Non-Standard Ceiling Grid or Wall Installation.

Procedure

1. Remove the ceiling tiles.
2. Align the bracket on the ceiling rail so that the bracket metal hinges are almost parallel to the sides of the ceiling rail.

3. Rotate the accessory clockwise until the metal hinges hook over the edge of the rail and the white tabs click in place.

Note
There are two white tabs on the back of the bracket that holds on to the ceiling rail. Use your finger to push and unhook one side of the white tab if you want to remove the bracket from the ceiling rail.

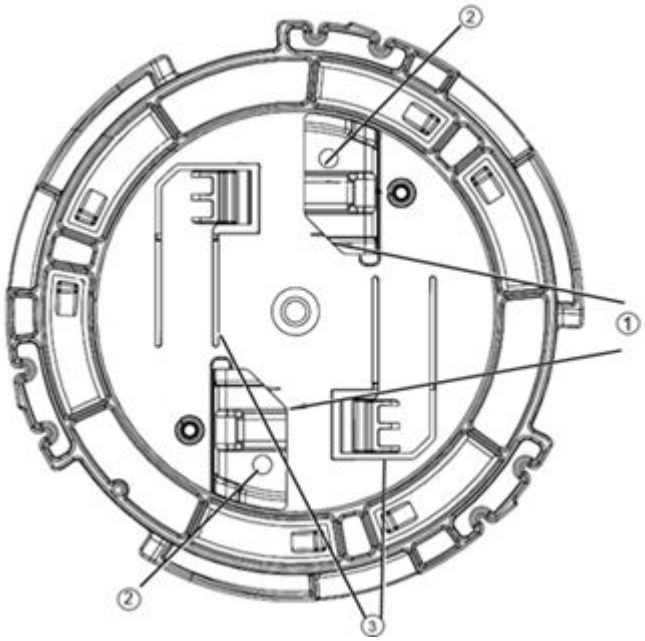


Figure 35: AH-ACC-BKT-AX-TB Bracket

Table 26: AH-ACC-BKT-AX-TB Bracket Parts

Callout	Description
1	Metal hinges on the AH-ACC-BKT-AX-TB bracket.
2	Mounting holes for wall mounting.
3	White tab on the AH-ACC-BKT-AX-TB bracket.

4. Align the red dot on the back of the access point against the bracket red dot.

Note
The bracket has a circular tip that fits into the circular depression on the back of the access point.

5. Press and rotate the access point one-eighth turn clockwise until it clicks into place on the bracket.

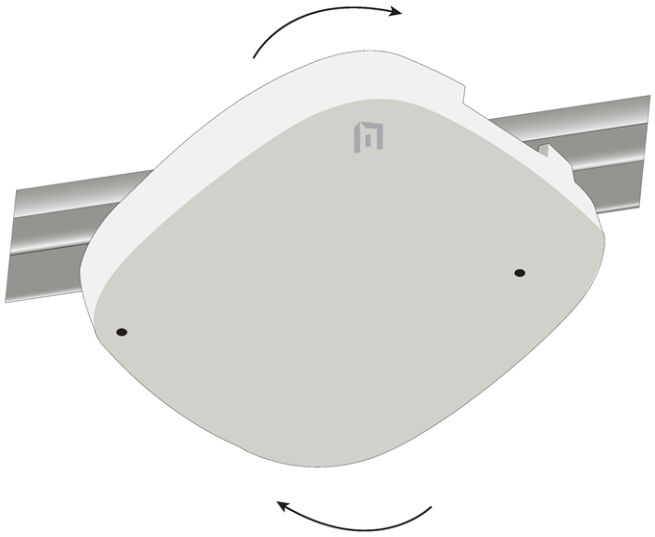


Figure 36: Access Point Ceiling Install

6. Attach the CAT6 RJ45 cable to the ETH0 port.
7. Replace the ceiling tiles.

Nonstandard Ceiling Grid or Wall Installation

You can install the access point on a nonstandard ceiling grid using the following accessories:

Table 27: Nonstandard Ceiling or Wall

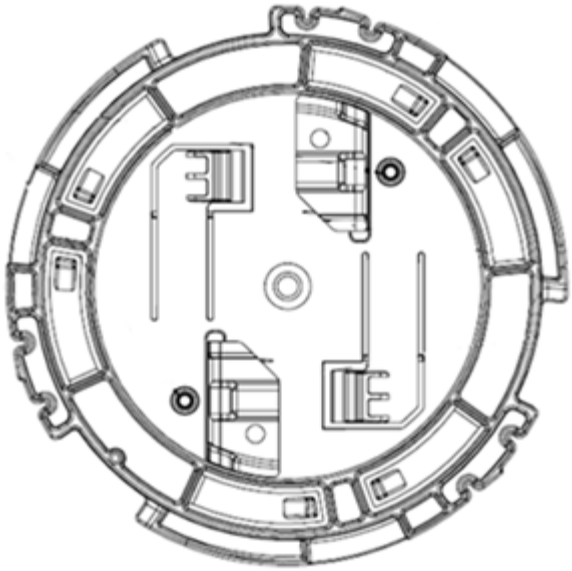
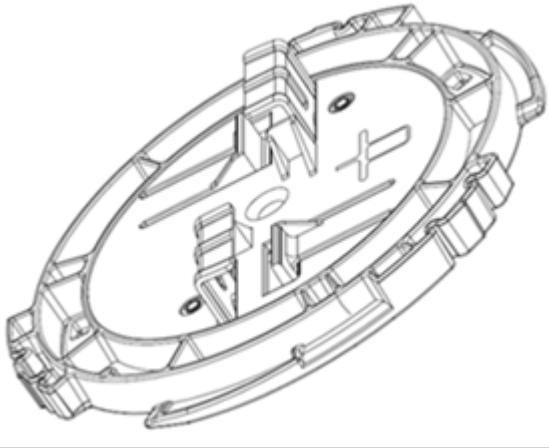
Order Part Number	Description
AH-ACC-BKT-AX-TB **Note:** Only this bracket is included with the access point	Mounting bracket for 15/16 in. ceiling grid. 
AH-ACC-BKT-AX-IL	Mounting bracket for 9/16 in. wide T-bar with protrusion, 9/16 in. ceilings, and walls. 

Table 27: Nonstandard Ceiling or Wall (continued)

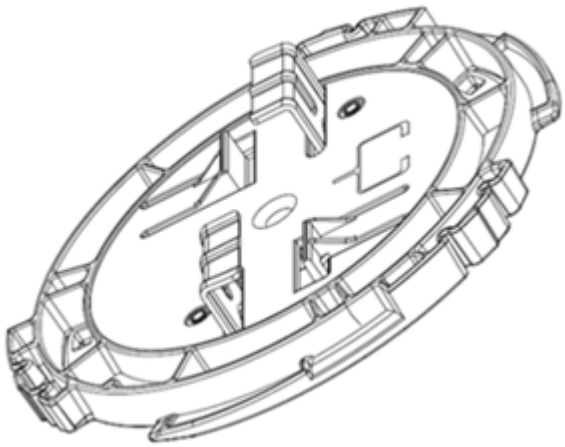
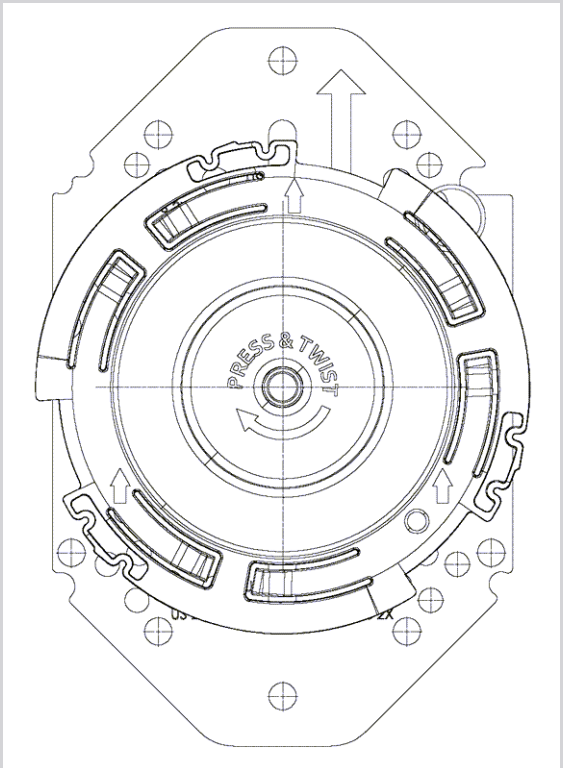
Order Part Number	Description
AH-ACC-BKT-AX-SL	Mounting bracket for 1/8 in. and 1/4 in. ceiling grids with a bottom opening. 
ACC-BKT-AX-JB	Junction box or wall mounting for indoor access points. 

Table 27: Nonstandard Ceiling or Wall (continued)

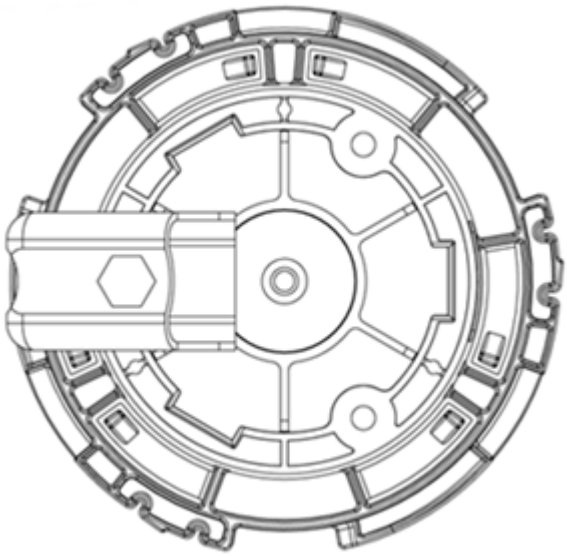
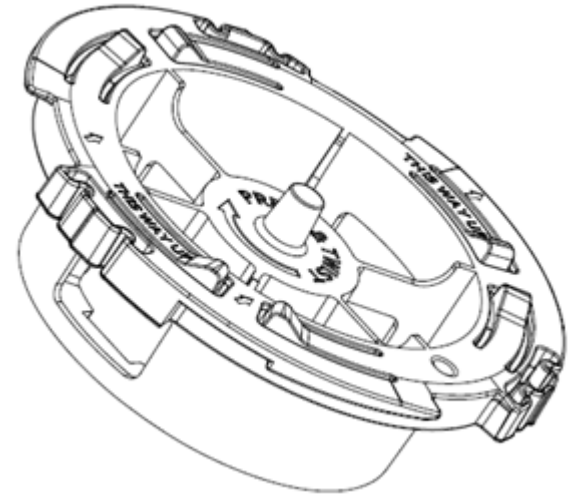
Order Part Number	Description
ACC-BKT-AX-BEAM	Beam mounting for indoor access points. 
AH-ACC-BKT-AX-WL	Mounting bracket for direct-to-wall installations. 

Table 27: Nonstandard Ceiling or Wall (continued)

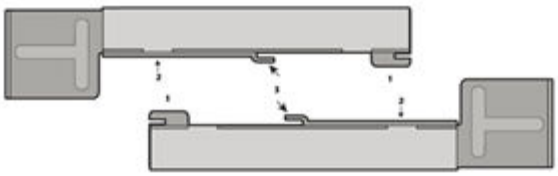
Order Part Number	Description
AH-ACC-BKT-916-KIT	9/16 in. ceiling mount brackets for non-flat and protruded ceiling tiles. Use with AH-ACC-BKT-AX-TB. 

Table 27: Nonstandard Ceiling or Wall (continued)

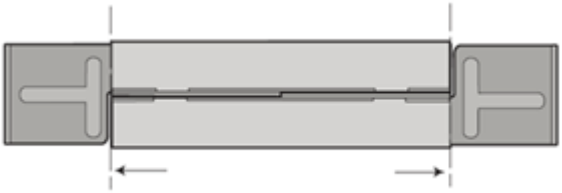
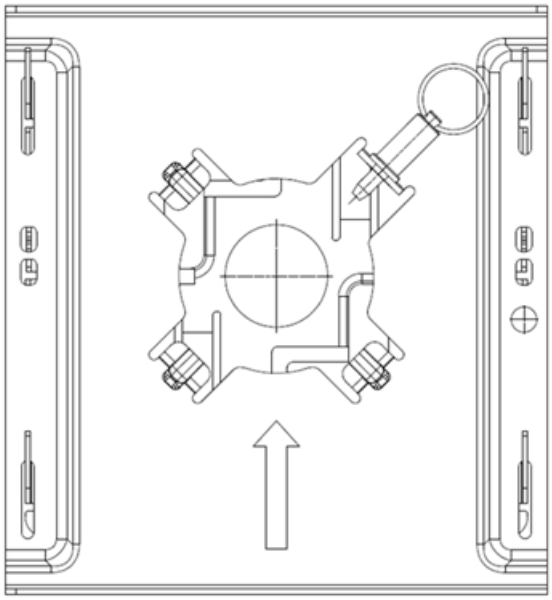
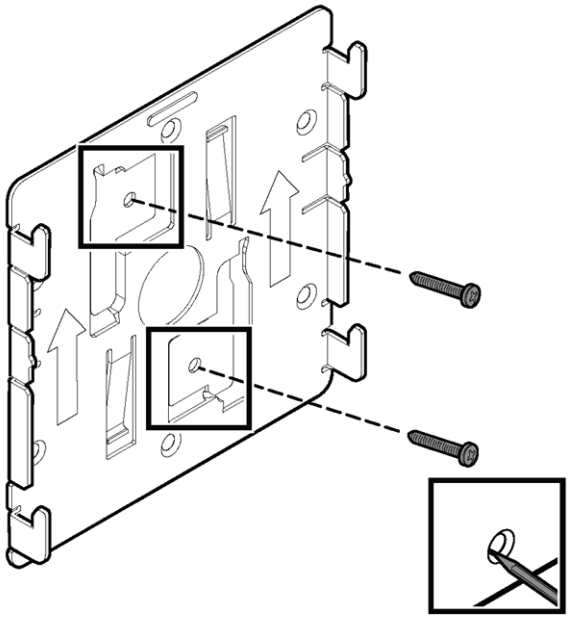
Order Part Number	Description
ACC-BKT-TB-NF	Adapter bracket for use with AH-ACC-BKT-TB with 15/16 in. wide T-bars on non-flat or protruded ceiling tiles. 
ACC-BKT-AX-WNGADAPT	Adapter bracket for use with cloud access point that has an existing WiNG mounting plate (#37201).  **Figure 37: ACC-BKT-AX-WNGADAPT Adapter Bracket**

Table 27: Nonstandard Ceiling or Wall (continued)

Order Part Number	Description
	 **Figure 38: WiNG Metal Bracket (#37201)**

Note
The default bracket for wall installation is the AH-ACC-BKT-AX-TB bracket. One -TB bracket is included with the AP. The AH-ACC-BKT-AX-WL bracket is for users who already have the -WL brackets.

In addition, the following extension kits are available for stepped or sculpted ceiling tiles:

Table 28: Extension Kits for Stepped Ceiling Tiles

Order Part Number	Description
AH-ACC-BKT-916-KIT	Mounting kit for 9/16 inch wide T-bars.
ACC-BKT-TB-NF	Mounting bracket for 15/16 inch wide T-bars.

Install the Access Point on a Wall with AH-ACC-BKT-AX-WL

Before You Begin

The following hardware is required for direct-to-wall installations:

- An indoor access point
- One AH-ACC-BKT-AX-WL bracket
- Three M3.5 screws and three screw-in anchors, shipped with the -WL bracket

About This Task

Use the AH-ACC-BKT-AX-WL bracket when you need a 1.25 in. space between the wall and the access point. If you want less space, use the AH-ACC-BKT-AX-TB that comes with the AP.

Procedure

1. Using the -WL bracket as a template, mark and drill mounting holes on the wall.
2. Through the bracket hole, route the LAN cable from the wall.

   Align the cable before attaching the bracket to the wall.

   Note
   Use a standard Ethernet cable if a visible cable is acceptable. To hide the cable, use a flat cable and a cable cap.

3. Attach the wall bracket to the wall using three M3.5 screws and three screw-in anchors.
4. Align the access point red dot against the three red dots on the -WL bracket.
5. Press and rotate the access point clockwise about one-sixth turn until it locks into place on the bracket.
6. Attach the network cable.

Install the Access Point on a Silhouette Ceiling

Before You Begin

You need the following items:

- One access point
- One AH-ACC-BKT-AX-SL bracket

About This Task

You can mount the access point to a ceiling grid with 1/8 in. or 1/4 in. bottom opening.

Silhouette is an Armstrong Ceiling Solutions name.

Procedure

1. Remove the ceiling tiles.
2. Place the bracket on the ceiling rail so that the accessory metal hinges are almost perpendicular to the sides of the ceiling rail with the ceiling rail over the center hole.
3. Lightly push onto the ceiling rail and rotate the accessory clockwise until the hinges hook over the edge of the rail and the white tabs click in place.

   Note
   There are two white tabs in the back of the bracket that holds on to the ceiling rail. Use your finger to pull and unhook one side of the white tab if you want to remove the accessory from the ceiling rail. Gently rotate the bracket counterclockwise and if there is resistance, the other white tab in the back of the accessory must also be released.

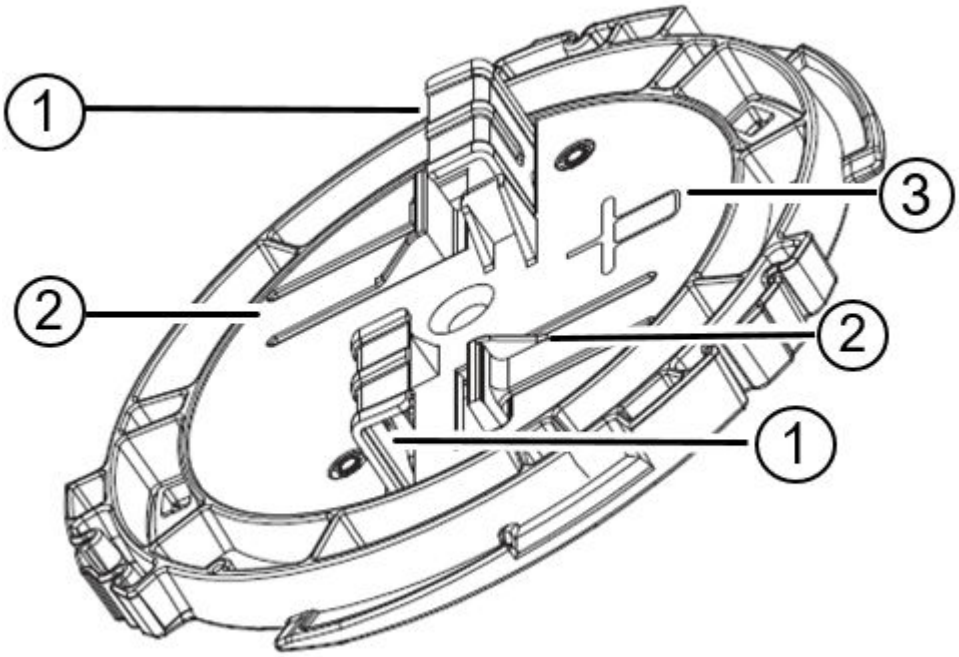


Figure 39: AH-ACC-BKT-AX-SL Accessory Bracket

Table 29: AH-ACC-BKT-AX-SL Accessory Bracket Parts

Call out	Description
1	Metal hinges on the AH-ACC-BKT-AX-SL bracket.
2	White tabs on the AH-ACC-BKT-AX-SL bracket.
3	Drawing of 1/8 in. or 1/4 in. ceiling grid, for your reference.

4. Align the red dot on the back of the access point against the accessory bracket red dot.

Note
The accessory has a circular tip that fits into the circular depression on the back of the access point.

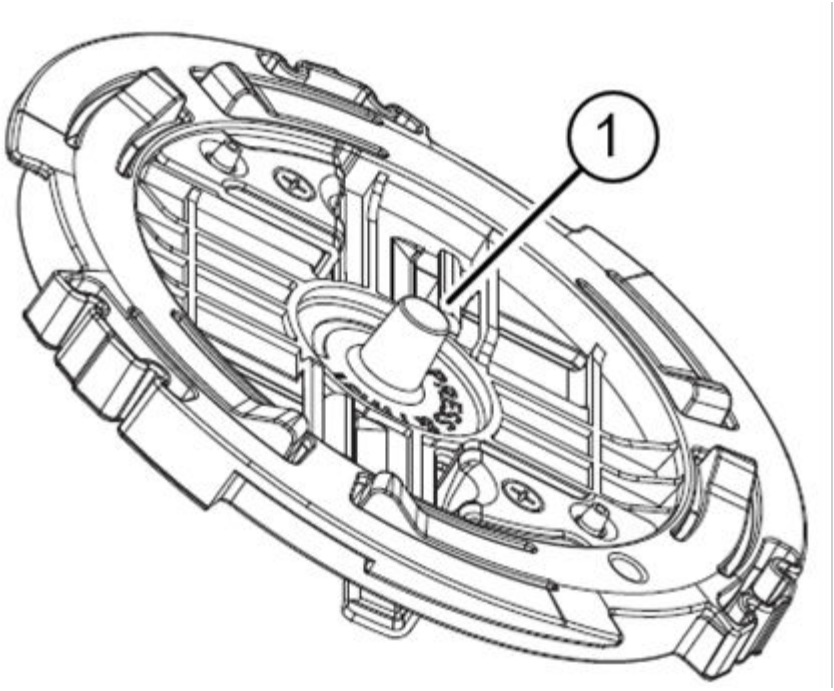


Figure 40: AH-ACC-BKT-AX-SL Accessory Bracket Circular Tip

Table 30: AH-ACC-BKT-AX-SL Accessory Bracket Tip Parts

Call out	Description
1	AH-ACC-BKT-AX-SL bracket circular tip.

5. Press and rotate the access point clockwise until it locks into place on the accessory.
6. Connect the network cable.
7. Replace the ceiling tiles.

Install the Access Point on a 9/16-inch T-bar

Before You Begin

You need the following items:

- One access point
- One AH-ACC-BKT-AX-TB accessory bracket if the T-bar bottom is flat
- One AH-ACC-BKT-AX-IL accessory bracket if there is a protrusion in the center of the T-bar bottom
- One AH-ACC-BKT-916-KIT if you have a protruded ceiling tile and you are using the AH-ACC-BKT-AX-TB bracket.

About This Task

You can mount the access point to a ceiling that has a 9/16 in. wide T-bar.

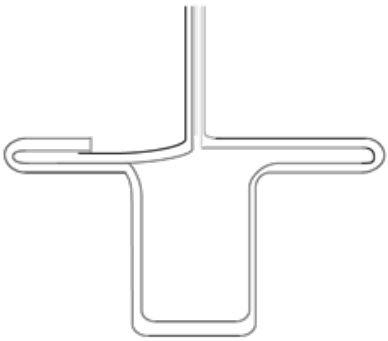


Figure 41: 9/16 in. Wide T-bar With Protrusion

Procedure

1. Remove the ceiling tiles.
2. Place the bracket on the ceiling rail in such a way that the accessory center is over the protrusion and the metal hinges are between perpendicular and about one-eighth of a turn from the sides of the ceiling rail.
3. Push up gently and rotate the bracket clockwise until the hinges hook over the edge of the rail and the white tabs click in place.

Note
Gently rotate the bracket counterclockwise and if there is resistance, the other white tab in the back of the accessory must also be released.

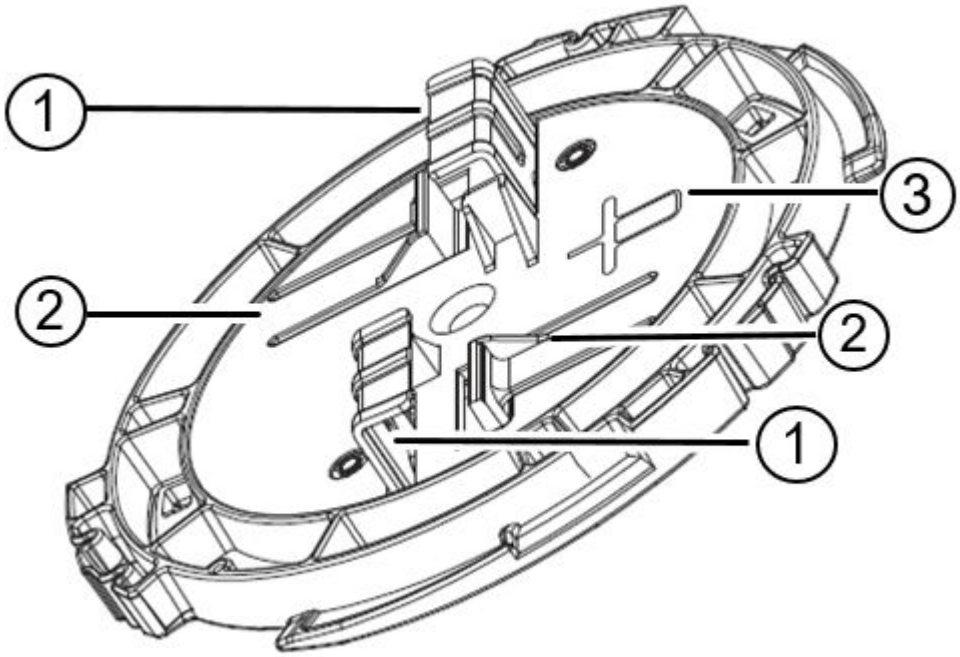


Figure 42: AH-ACC-BKT-AX-IL Accessory Bracket

Table 31: AH-ACC-BKT-AX-IL Parts

Callout	Description
1	Metal hinges on the AH-ACC-BKT-AX-IL bracket.
2	White tabs on the AH-ACC-BKT-AX-IL bracket.
3	Drawing of 9/16 in. ceiling grid, for your reference.

4. Align the red dot on the back of the access point against the accessory red dot.

Note
The bracket has a circular tip that fits into the circular depression on the back of the access point.

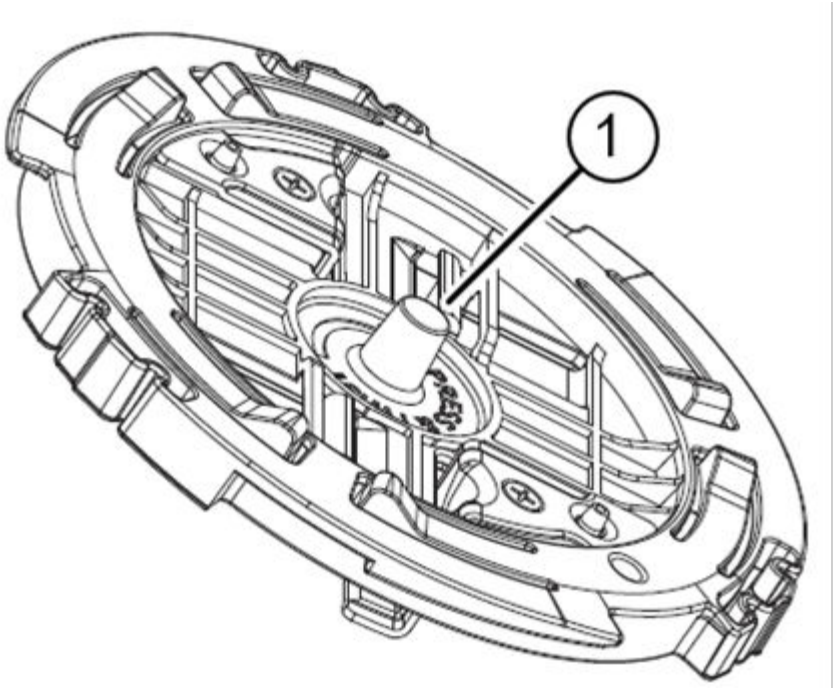


Figure 43: AH-ACC-BKT-AX-IL Accessory Bracket Circular Tip

Table 32: AH-ACC-BKT-AX-IL Parts

Call out	Description
1	AH-ACC-BKT-AX-IL bracket circular tip.

5. Press and rotate the access point clockwise about one-eighth of a turn until it locks into place on the accessory bracket.
6. Attach the network cable.
7. Replace the ceiling tiles.

Install the Access Point on a 15/16-inch T-bar

Before You Begin

Obtain the following items:

- One AP3020/X
- One ACC-BKT-TB-NF adapter
- One AH-ACC-BKT-AX-TB accessory

About This Task

Use the ACC-BKT-TB-NF bracket when you install the AP on a suspended ceiling with 15/16-in. grid system.

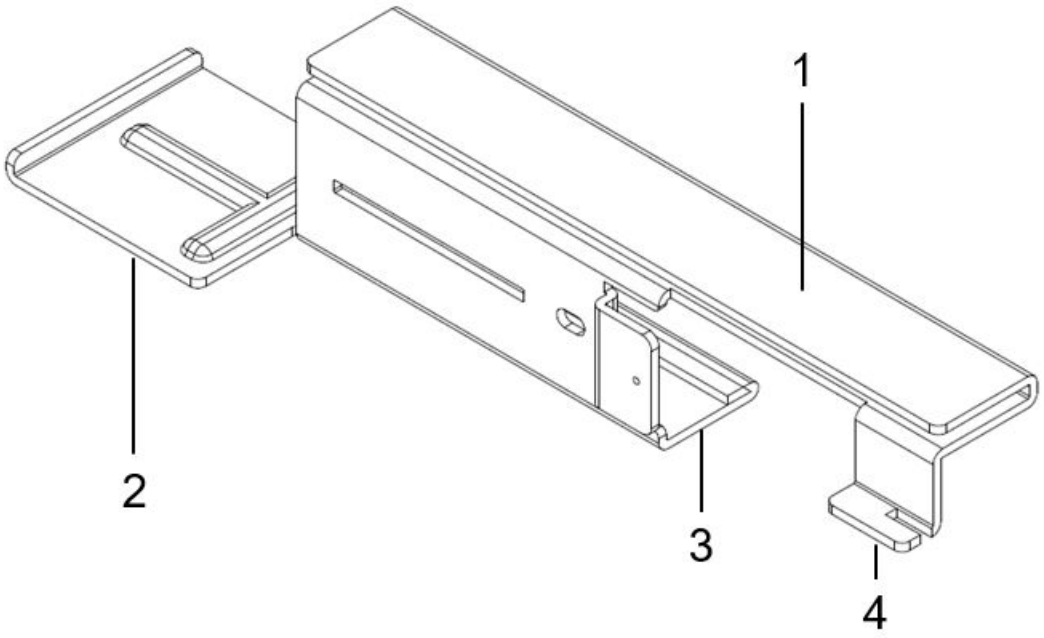


Figure 44: ACC-BKT-TB-NF Adapter

Table 33: ACC-BKT-TB-NF Adapter Parts

Callout	Description
1	Adapter guide for ceiling rail attachment.
2	Adapter end.
3	Indent for - NF second part attachment.
4	Adapter tabs.

Procedure

1. Remove the ceiling tiles.
2. Using the adapter guide on the top half of the ACC-BKT-TB-NF adapter, align and attach the -NF on to the ceiling rail.
3. Slide the other part of the -NF adapter onto the half attached to the ceiling rail.

Note
When the adapter parts are attached properly, the adapter ends line up after the two halves have snapped together.

4. Attach the AH-ACC-BKT-AX-TB accessory onto the -NF adapter.
   a. Center the -TB accessory on the attached -NF parts.
   b. Push up and rotate the -TB accessory clockwise until the metal hinges hook over the bottom halves of the -NF adapter ends and the plastic tabs on the -TB accessory click into place.

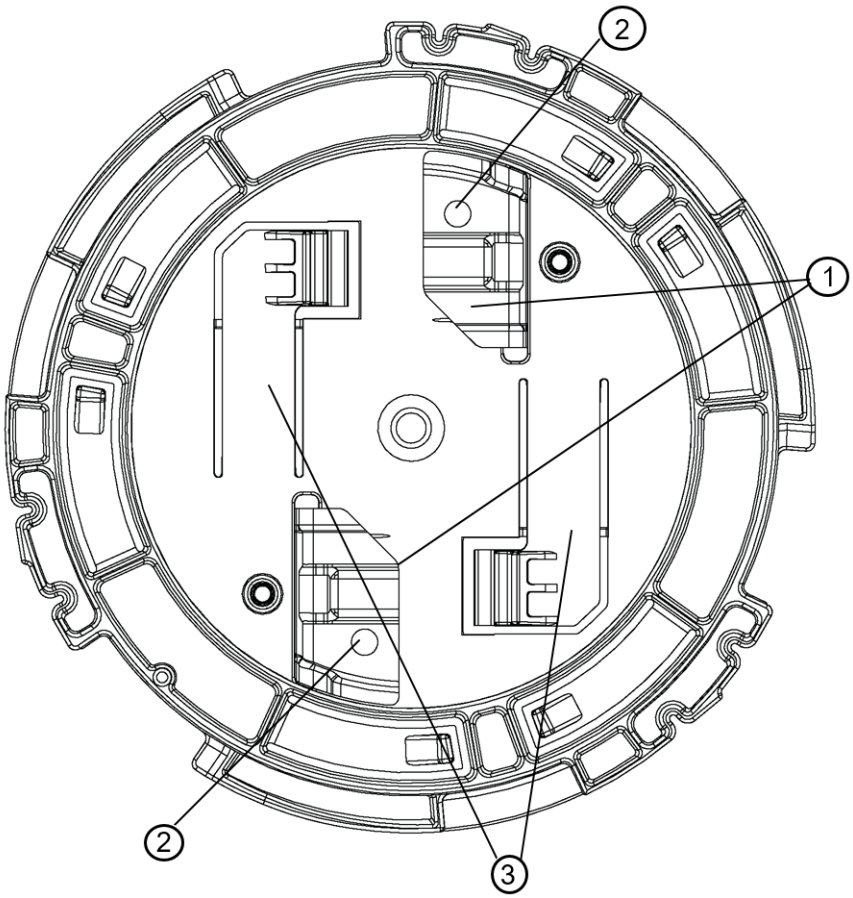


Figure 45: AH-ACC-BKT-AX-TB Accessory Bracket

Table 34: AH-ACC-BKT-AX-TB Accessory Bracket Parts

Callout	Description
1	Metal hinges on the AH-ACC-BKT-AX-TB bracket.
2	Mounting holes for wall mounting.
3	White plastic tab on the AH-ACC-BKT-AX-TB bracket.

5. Align the red dot on the back of the access point against the -TB bracket red dot.

Note
The bracket has a circular tip that fits into the circular depression on the back of the access point.

6. Connect the network cable.
7. Replace the ceiling tiles.

Install the Access Point on a Beam

Before You Begin

The following hardware is required to install the access point on a beam:

- An indoor model access point
- ACC-BKT-AX-BEAM accessory

Beam properties checklist:

- The beam must be able to support the access point in all environmental conditions.
- The beam must be flat.
- Beam attachment area is at least 0.5 in. (12.7mm) wide and as long as the largest dimension of the AP.
- Beam mounting surface is at least 0.040 in. (1.0 mm) thick, but less than 0.650 in. (16.5mm) thick.

About This Task

If you are installing the access point in a warehouse or other industrial environments, you might have to install the AP on a beam instead of a ceiling.

Procedure

1. Align the red dot on the access point with the red dot on the accessory bracket.
2. Insert the plastic part posts into the access point back recess.
3. Push the access point onto the plastic part, and rotate the access point about one-sixth turn clockwise to make it lock in place.

   If you can turn or twist the access point, it was not locked in place properly. Remove the access point and attach it again until it locks in place.
4. Connect the network cable.

5. Open the top screw as necessary and place the beam clip onto a beam.

Note
You must hold the access point when attaching the beam clip.

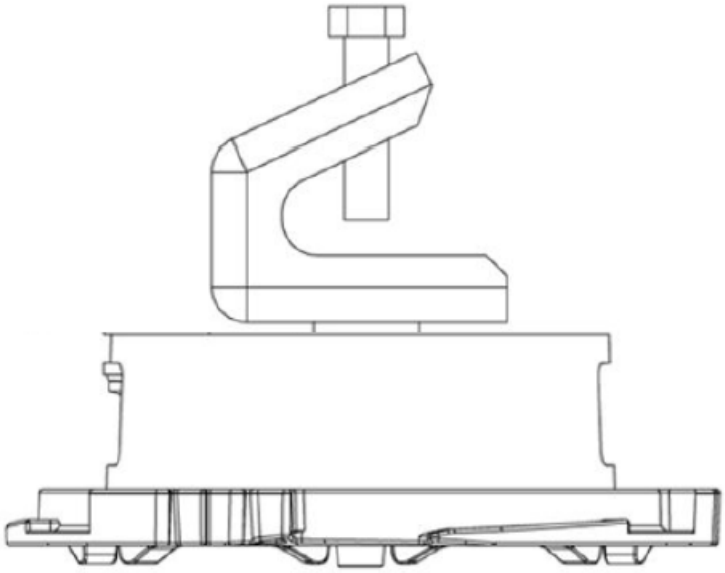


Figure 46: ACC-BKT-AX-BEAM Accessory Bracket

6. Tighten the top screw on the beam to a torque of 5.65 N-m (50 in-lb).

Install the Access Point on a Junction Box

Before You Begin

You need the following items:

- One AP3020/X
- ACC-BKT-AX-JB for junction box mounting.

About This Task

Install the access point to a junction box if you want to power the AP using an electrical connection.

The ACC-BKT-AX-JB accessory bracket is used when you need to install the access point on an indoor junction box. It has two parts:

- A metal part that attaches to the junction box (also called the sheet-metal junction box hole plate)
- A plastic part that attaches to the metal part and the access point (also called the plastic twist plate)

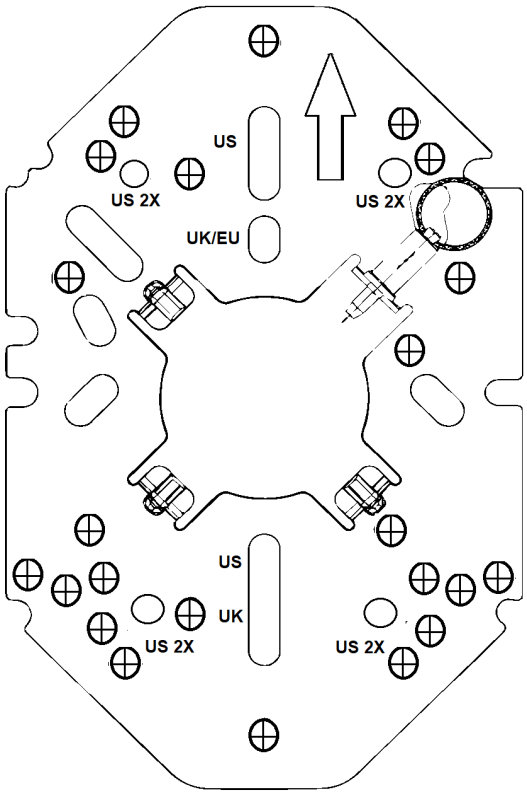


Figure 47: ACC-BKT-AX-JB Accessory Bracket Metal Part

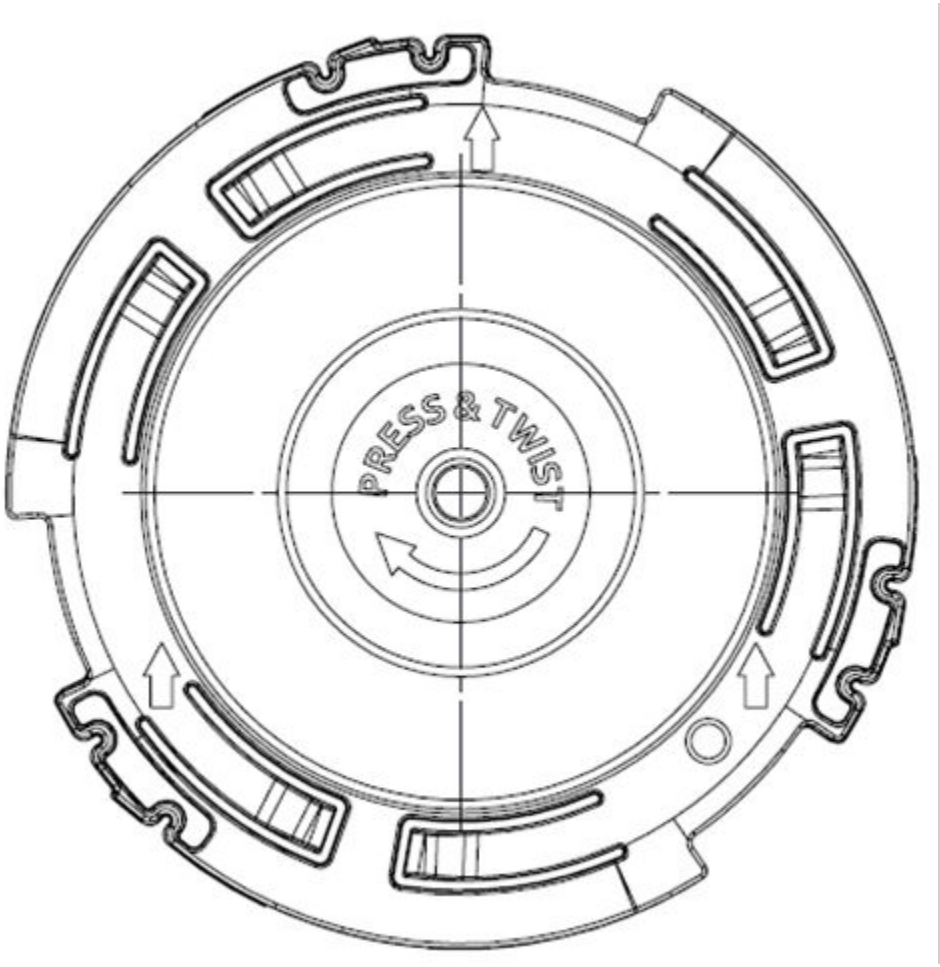


Figure 48: ACC-BKT-AX-JB Accessory Bracket Plastic Part

Procedure

1. Remove the screws holding the junction box cover plate.
2. Remove the LAN cable from the cover plate.
3. Bring the LAN cable through the center hole of the metal bracket part.

   The LAN wire must be between the metal part and the plastic part during installation.
4. Place the ACC-BKT-AX-JB accessory metal part, with the bracket holes against the cover plate of the box.
5. Align the bracket holes with the junction box screw holes. Make sure that the hole labels are readable.
6. Using the cover plate screws, attach the metal bracket part to the junction box.
7. Place the plastic part on the metal part, rotate it one-quarter to one-third turn clockwise until you hear it click in place as the lock is set.

Important
When installed correctly on a wall, the side arrows on the plastic part must be pointing up.

Note

There is a metal pull ring in the metal part that is used to unlock and remove the plastic part.

To unlock the plastic part, pull out the pin ring and turn the plastic part one-third turn counterclockwise and lift it apart.

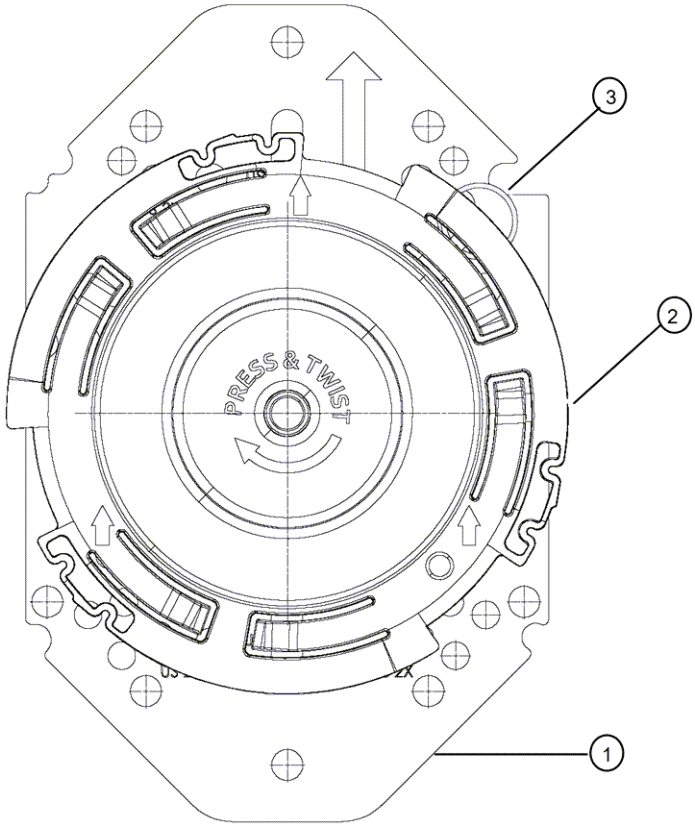


Figure 49: Junction Box Accessory Bracket Assembly

Table 35: Junction Box Accessory Bracket Components

Callout	Description
1	Sheet-metal junction box hole metal part
2	Plastic twist plate part
3	Pull ring with 10-mm diameter ring for unlocking the plastic part

8. Align the red dot on the back of the access point against the red dot on the plastic part.
9. Push the access point onto the plastic part and turn it clockwise until you hear it lock in place.
10. Insert the RJ45 connector into the Ethernet port on the AP.
11. Use a flat Ethernet cable and a cap to hide the cable.

(Optional) Lock the Access Point

Before You Begin

You need a Kensington security lock.

About This Task

Secure the access point from damage or theft.

Procedure

1. Securely attach the free end of the Kensington lock cable near the AP.
2. Insert the rectangular lock end into the Kensington security slot on the AP.
3. Lock the Kensington lock.

Install an AP Using the WNGADAPT Bracket

About This Task

For any indoor concrete wall installations, use the ACC-BKT-AX-WNGADAPT adapter bracket parts with an existing 37201 metal bracket.

Warning
Do not use the AH-ACC-BKT-AX-TB bracket for indoor concrete wall installations.

Note
The 37201 metal mounting bracket ships with indoor WiNG access points. If you do not have the 37201 metal bracket, order it separately.

Attach the 37201 bracket to the wall before installing the WNGADAPT adapter. The 37201 main mounting bracket ships with the following items:

- One 37201 main mounting bracket
- Two Phillips pan-head screws
- Two screw-in anchors

Note
For concrete wall installations, you must provide screws and screw-in anchors.

1. Use the metal mounting bracket as a template and mark and drill two mounting holes.

Note
The four bracket feet and the engraved bracket arrows must be pointing up.

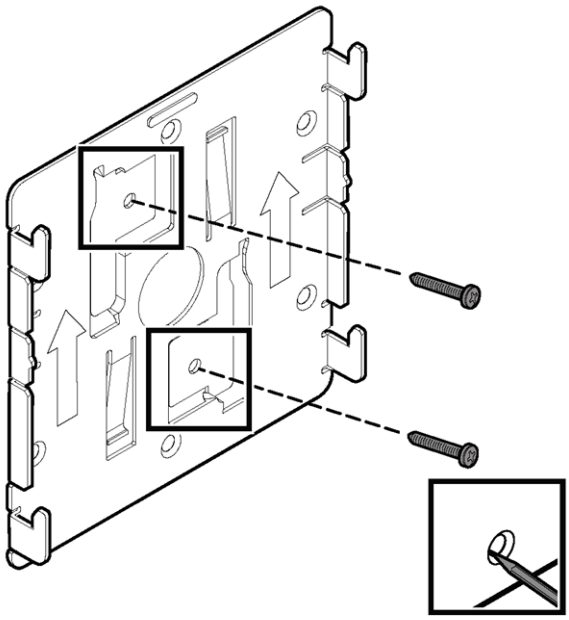


Figure 50: 37201 Main Mounting Metal Bracket

2. Attach the screw-in anchors to the mounting holes.

Note
Plastic screws and screw-in anchors are for drywall and metal screws and screw-in anchors are for drywall or wood wall installations.

For concrete wall installations, use a masonry anchor which slips into a drilled hole and expands as the bolt is tightened. Masonry anchors are not provided with the #37201 bracket.

3. Place the metal bracket over the mounting holes and run the LAN cable through the large center hole on the metal mounting bracket.
4. Attach the bracket using two pan-head screws for drywall, wood wall, or metal installations.

   Masonry anchors have integral threaded studs. If you are attaching the 37201 bracket to a concrete wall, the anchor studs must protrude through the holes where a hex nut is tightened.

The WNGADAPT plate ships with two parts:

- One WNGADAPT circular plastic twist part
- One WNGADAPT metal plate

Procedure

1. With the WNGADAPT metal plate engraved arrows pointing up, place the WNGADAPT metal plate over the 37201 metal mounting bracket.

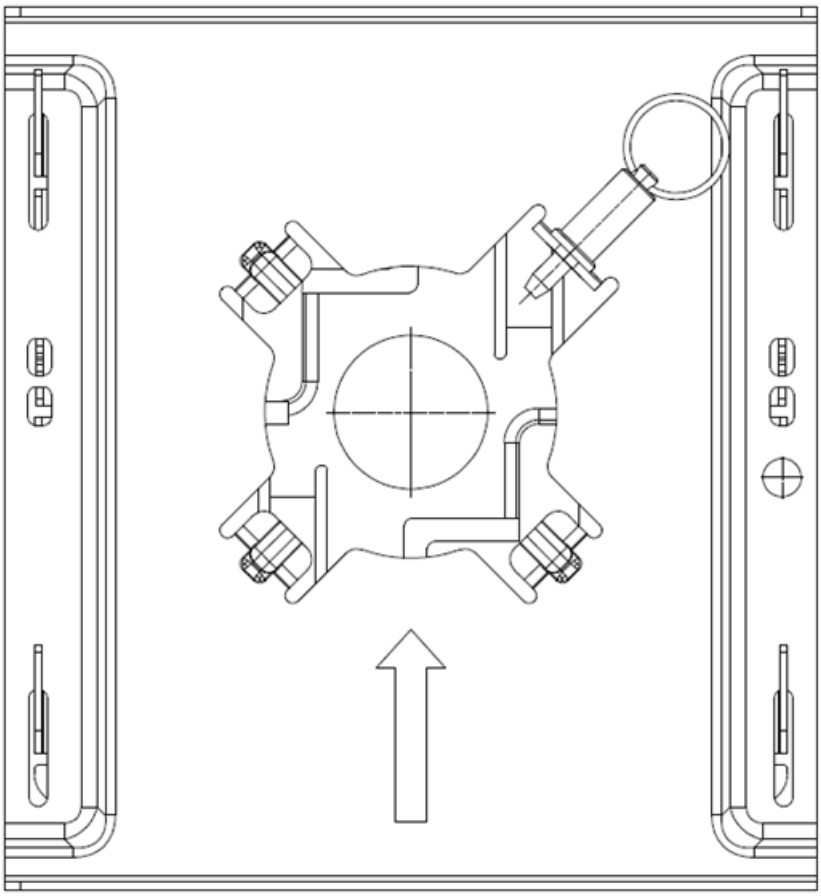


Figure 51: AX-BKT-WNGADAPT Bracket

2. Run the LAN cable through the large center opening on the WNGADAPT plate.
3. Push the WNGADAPT metal plate down on to the 37201 bracket until the metal plate clicks in place.
4. Line the plastic twist part embossed dot against the red dot on the WNGADAPT metal plate.

Note
Bring the LAN cable up between the WNGADAPT metal plate and the plastic twist part.

5. Rotate the twist part clockwise one-quarter of a turn until the locking pin on the WNGADAPT metal plate clicks into place.
6. Line up the red dot on the rear of the access point against the red dot on the plastic twist part.
7. Verify that the center recess on the access point aligns with the center post on the plastic twist part.

8. Rotate the access point one-sixth of a turn clockwise until it clicks into place.
9. Connect the LAN cable to the Ethernet port.

   If the cable provides PoE, the access point starts.

Note
(Optional) To hide the cable, use an in-line coupler, a flat cable, and a cosmetic cap.

Onboard the Access Point with the ExtremeCloud IQ Mobile Onboarding App

Before You Begin

You can download the ExtremeCloud IQ Mobile Onboarding application to your mobile device from the Google Play or from the Apple App Store. For more information, see *APs Onboarding - An Effortless Onboarding Experience*.

You need administrator login privileges. Contact your network administrator if you need login credentials.

About This Task

You can use the ExtremeCloud IQ Mobile Onboarding application to quickly onboard, monitor, and troubleshoot access points.

Procedure

1. Open the ExtremeCloud IQ Mobile Onboarding application.
2. Enter your login information.
3. Tap **Add a Device**.
4. Scan the QR code or bar code on the back of the AP with your mobile device camera.
5. Verify the AP model and serial number.
6. Select the location.
7. Select the network policies for the AP.

Troubleshoot the AP

Use the information in the following sections to troubleshoot your AP.

Micro USB Console Port

Use the micro-USB console port to make a serial connection between your management system and the access point. You can order a micro USB console adapter for your access point using the part number ACC-WIFI-MICRO-USB.

Note
When you connect to the micro-USB console port, the management station from which you connect to the device must have a VT100 emulation program, such as TeraTerm Pro (a free terminal emulator) or Hilgraeve HyperTerminal (provided with Windows operating systems from XP forward).

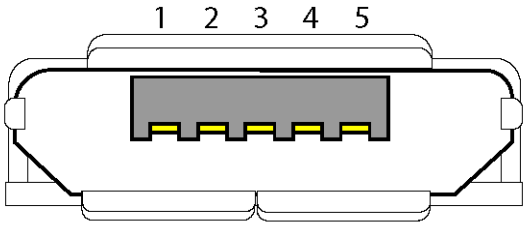


Figure 52: Micro-B Model Console Port Pin Information

Table 36: Micro-B USB Pin Information

Pin Number	Pin Name and Description
1	NC.
2	R×D (input to access point).
3	T×D (output to terminal).
4	Signal (GND).
5	Signal (GND).

Reset the AP

Perform a reboot or factory reset to resolve minor or temporary issues. A reboot deletes the logs, but preserves all of the configuration settings. A factory reset deletes your configuration settings and restores the AP to the original factory settings.

See LED Descriptions for an explanation of LED display.

The **Reset** button is located next to the Console port.

Perform a Reboot

A reboot, also called a power cycle, deletes the logs, but preserves all of the configuration settings. It also applies firmware upgrades and is often done to clear minor issues such as software issues or if the AP is not responding.

There are two ways to reboot the AP:

- With a hardware reboot. To reboot the AP, press and immediately release the **Reset** button.

  Important
  When you perform a hardware reboot, press and release the Reset button. Do not hold the **Reset** button. If you hold the **Reset** button, the AP starts a factory reset.

- With ExtremeCloud IQ Controller and ExtremeCloud IQ. See ExtremeCloud IQ Controller User Guide or ExtremeCloud IQ User Guide. This is often done after installation or if the AP cannot be easily accessed.

Perform a Factory Reset

A factory reset deletes your configuration settings and restores the AP to the original factory settings.



Note
Perform a factory reset only when you want to restore the AP to its original factory settings.

There are two ways to factory reset the AP:

- With a hardware reset - press and hold the **Reset** button for at least 10 seconds.
- With ExtremeCloud IQ Controller and ExtremeCloud IQ. See ExtremeCloud IQ Controller User Guide or ExtremeCloud IQ User Guide.

Regulatory and Compliance

Safety Guidelines on page 76
Professional Installation Instruction on page 77
FCC Notice (Part 15 - Class B) on page 77
FCC Radiation Exposure Statement on page 78
Country of Manufacture on page 78
Brazil Agência Nacional De Telecomunicações (Anatel) Statement on page 78
China Compliance Statement on page 78
Japan (VCCI) - Voluntary Control Council for Interference Class B ITE on page 79
Mexico Compliance Statement on page 79
Extreme Networks UK Address on page 79
Extreme Networks EU Importer Address on page 80
Industry Canada Notice on page 80
UK Statement and CE Statement on page 81
Thailand Regulatory Statement on page 82
Taiwan Regulatory Statement on page 83
European Waste Electrical and Electronic Equipment (WEEE) Notice on page 84
Declaration of Conformity in Languages of the European Community on page 85

Learn about safety guidelines, compliance notices, and regulatory information pertaining to various countries in which the device can be used.

Safety Guidelines

The following safety guidelines are intended to protect your personal safety and prevent damage to the equipment.

Important
Only qualified personnel must perform installation procedures. Within the context of the safety notes in this documentation, qualified persons are defined as persons who are authorized to commission grounding, label devices, systems, and circuits in accordance with established safety practices and standards. A qualified person understands the requirements and risks involved with installing outdoor electrical equipment in accordance with national codes.

Professional Installation Instruction

Installation Personnel

This product is designed for specific application and needs to be installed by a qualified personnel who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.

Installation Procedure

Refer to the installation instructions for details.

Warning
Select the installation position and ensure that the final output power does not exceed the limit set forth in relevant rules. The violation of the rule could lead to serious federal penalty.

Installation

Ce produit est destine a un usage specifique et doit etre installe par un personnel qualifie maitrisant les radiofrequences et les regles s'y rapportant. L'installation et les reglages ne doivent pas etre modifies par l'utilisateur final.

Procedure d'installation

Consulter le manuel d'utilisation.

Warning
Avertissement: Choisir avec soin la position d'installation et s'assurer que la puissance de sortie ne depasse pas les limites en vigueur. La violation de cette regle peut conduire a de serieuses penalites federales.

FCC Notice (Part 15 - Class B)

1. For 5925-6425 MHz and 6525-6875 MHz transmitter operation in Standard power access point mode: The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft.
2. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.
3. For 5925-7125 MHz transmitter operation in Low Power Indoor mode: FCC regulations restrict the operation of this device to indoor use only. The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet in the 5.925-6.425 GHz band. Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.
4. This device is restricted to indoor use.

FCC Radiation Exposure Statement

Warning
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 31 cm between the radiator and your body.

Caution
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Country of Manufacture

Vietnam

Manufacturer: WNC VIETNAM CO., LTD.

Address: Land Lot CN01, Dong Van III Industrial Zone, Dong Van Ward, Ninh Binh Province, Vietnam

Taiwan

Manufacturer: WNC Corporation (S1 manufacturing site)

Address: 5 Lihsin Rd. VI, Hsinchu Science Park, Hsinchu 300, Taiwan

Brazil Agência Nacional De Telecomunicações (Anatel) Statement

1. Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados. Para maiores informações, consulte o site da ANATEL – www.anatel.gov.br.

   Este produto está homologado pela ANATEL, de acordo com os procedimentos regulamentados pela Resolução n°. 242/2000 e atende aos requisitos técnicos aplicados
2. O uso deste equipamento é restrito a ambientes fechados e proibido em plataformas petrolíferas, carros, trens, embarcações e no interior de aeronaves abaixo de 3.048 m (10.000 pés).

China Compliance Statement

核准编号 CMIIT ID 在产品铭牌位置标识

6 GHz is only available in specific countries. It is not available in China. 6 GHz 仅在特定国家可用。在中国不可用。

(一）符合“微功率短距离无线电发射设备目录和技术要求”的具体条款和使用场景，采用的天线类型和性能，控制、调整及开关等使用方法;

（二）不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率（包括额外加装射频功率放大器），不得擅自更改发射天线;

（三）不得对其他合法的无线电台（站）产生有害干扰，也不得提出免受有害干扰保护；

（四）应当承受辐射射频能量的工业、科学及医疗（ISM）应用设备的干扰或其他合法的无线电台（站）干扰；

（五）如对其他合法的无线电台（站）产生有害干扰时，应立即停止使用，并采取措施消除干扰后方可继续使用；

（六）在航空器内和依据法律法规、国家有关规定、标准划设的射电天文台、气象雷达站、卫星地球站（含测控、测距、接收、导航站）等军民用无线电台（站）、机场等的电磁环境保护区域内使用微功率设备，应当遵守电磁环境保护及相关行业主管部门的规定；

（七）禁止在以机场跑道中心点为圆心、半径 5000 米的区域内使用各类模型遥控器；

（八）微功率设备使用时温度和电压的环境条件。 使用微功率短距离无线电发射设备应当符合国家无线电管理有关规定

Japan (VCCI) - Voluntary Control Council for Interference Class B ITE

This is a class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

この装置は，クラスB情報技術装置です。この装置は，家庭環境で使用することを目的としていますが，この装置がラジオやテレビジョン受信機に近接して使用されると，受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。
VCCI－B

Mexico Compliance Statement

La operacion de este equipo esta sujeta a las siguientes dos condiciones:

1. es posible que este equipo o dispositivo no cause interferencia perjudicial y
2. este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operacion no deseada.
3. Se restringe el funcionamiento de este equipo solo para uso en interiores,
4. A este equipo no deben conectarse antenas externas,
5. Este equipo no debe ser resistente a condiciones climáticas adversas, no debe utilizar baterías y la fuente de alimentación debe estar conectada directamente a la toma de corriente eléctrica.

Extreme Networks UK Address

Extreme Networks, Ireland Ops Ltd.

Rineanna House Shannon Industrial Estate

Shannon, V14CA36 Ireland

Extreme Networks EU Importer Address

Extreme Networks, UK Ltd.

250 Longwater Avenue Green Park

1st Floor

Reading, UK

Industry Canada Notice

This device complies with ISED's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

RLAN devices operating in 5925-7125MHz subject to following -

- Devices shall not be used for control of or communications with unmanned aircraft systems.
- Devices shall not be used on automobiles, trains, maritime vessels, and oil platforms.
- Devices shall not be used on aircraft, except for the low-power indoor access points, indoor subordinate devices, low-power client devices, and very low-power devices operating in the 5925-6425 MHz band, that may be used on large aircraft as defined in the Canadian Aviation Regulations, while flying above 3,048 meters (10,000 feet).

Standard Power devices operating in 5925-7125MHz subject to following-

- The device must be installed only with authorized antennae and models listed by manufacturer in product documentation. Device and antenna that requires mounting brackets must be installed with manufacturer specified brackets listed in product documentation to comply with elevation mask requirements.
- The antenna height shall be determined by the installer or operator of the standard power device or fixed client device or by automatic means.

AP3020 Antenna Information

This product uses an integrated internal antenna, permanently installed and not user-replaceable.

AP3020X Antenna Information

This device uses both integrated internal and detachable external antenna. Antenna types, models, and gain information can be found in product documentation. Installer and operator must only use manufacturer approved antenna listed in the product documentation to comply with elevation mask requirements.

Tested Antennas

- ML-2452-APA2-02 (WNC): Dipole Omni, reverse SMA, 2.4 GHz: 2.71 and 5 GHz: 4.46dBi
- AIO-DD75060-RPSMA (Extreme Networks): Panel, sector 60°, reverse SMA, 2.4 GHz: 7.17dBi and 5 GHz: 7dBi

- AIO-DD05120-RPSMA (Extreme Networks): Dual-Polarized Panel, sector 120°, reverse SMA, 2.4 GHz: 5.17dBi and 5 GHz: 4.5dBi
- AIO-DD15020-RPSMA (Extreme Networks): MIMO directional panel, reverse SMA, 2.4 GHz: 11.67dBi and 5 GHz: 14.5dBi

Radiation Exposure Statement

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 40 cm between the radiator & your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 40 cm de distance entre la source de rayonnement et votre corps.

UK Statement and CE Statement

This equipment complies with the UK and EEA radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20cm between the radiator and your body.

The frequency and the maximum transmitted power in the UK and European Conformity are listed in the following table:

Table 37: AP3020 Frequencies and Transmitted Power

CE	UK
2402-2480MHz (BT): 9.87 dBm	2402-2480MHz (BT): 9.87 dBm
2405-2480 MHz(802.15.4): 6.47 dBm	2405-2480 MHz(802.15.4): 6.47 dBm
2412-2472 MHz: 19.98 dBm	2412-2472 MHz: 19.98 dBm
5180-5240 MHz: 22.97 dBm	5180-5240 MHz: 22.97 dBm
5260-5320 MHz: 22.97 dBm	5260-5320 MHz: 22.97 dBm
5500-5700 MHz: 29.97 dBm	5500-5700 MHz: 29.97 dBm
5745-5825 MHz: 13.95 dBm	5745-5825 MHz: 22.97 dBm
5955-6415 MHz: 22.98 dBm	5955-6415 MHz: 22.98 dBm

Table 38: AP3020X Frequencies and Transmitted Power

CE	UK
2408-2480MHz (BT): 9.96 dBm	2408-2480MHz (BT): 9.96 dBm
2405-2480 MHZ(802.15.4): 7.64 dBm	2405-2480 MHZ(802.15.4): 7.64 dBm
2412-2472 MHz: 19.98 dBm	2412-2472 MHz: 19.98 dBm
5180-5240 MHz: 22.97 dBm	5180-5240 MHz: 22.97 dBm
5260-5320 MHz: 29.98 dBm	5260-5320 MHz: 29.98 dBm
5500-5700 MHz: 29.96 dBm	5500-5700 MHz: 29.96 dBm

Table 38: AP3020X Frequencies and Transmitted Power (continued)

CE	UK
5745-5825 MHz: 13.97 dBm	5745-5825 MHz: 22.97 dBm
5955-6415 MHz: 22.97 dBm	5955-6415 MHz: 22.97 dBm

CE - The device is restricted to indoor use only when operating in the 5945 to 6425 MHz frequency range.

UK - The device is restricted to indoor use only when operating in the 5945 to 6425 MHz frequency range.

Hereby, Extreme Networks declares that the radio equipment AP3020/X is in compliance with Radio Equipment Regulations 2017.

Operation on oil platforms, cars, trains, boats, and aircraft shall be prohibited except for on large aircraft flying above 10,000 ft.

For full text of the UK Declaration of Conformity, please contact Extreme Networks Regulatory Compliance at compliancerequest@extremenetworks.com.

Warning
CE Co-location MPE Statement: This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

Table 39: Selling Countries:

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK (NI)

Warning
This is a class B product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Thailand Regulatory Statement



Taiwan Regulatory Statement

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

應避免影響附近雷達系統之操作。

高增益指向性天線只得應用於固定式點對點系統

This product shall be powered by a power supply that complies with the applicable standard requirements (domestic certification). At least one recommended brand and model of the power supply shall be specified.

此產品建議使用符合標準規定(國內驗證)之該電源供應器（Phihong ,POE60U-BTA,）供電，且該電源供應器的電氣規格資料(輸出規格: 56V / 1.07A)

請至此連結閱讀中文說明: https://www.extremenetworks.com/support/documentation.

Taiwan RoHS Statement

單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
金屬零件 (Metal Parts)	○	○	○	○	○	○
電路模組 (Circuit Modules)	–	○	○	○	○	○
電纜及電纜組件 (Cables & Cable Assemblies)	○	○	○	○	○	○
塑料和聚合物零件 (Plastic and Polymeric parts)	○	○	○	○	○	○

備考1. "超出0.1 wt %" 及 "超出0.01 wt %" 係指限用物質之百分比含量超出百分比含量基準值。
Note 1 : "Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.

備考2. "○" 係指該項限用物質之百分比含量未超出百分比含量基準值。
Note 2 : "○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考3. "–" 係指該項限用物質為排除項目。
Note 3 : The "–" indicates that the restricted substance corresponds to the exemption.

European Waste Electrical and Electronic Equipment (WEEE) Notice



In accordance with Directive 2012/19/EU of the European Parliament on waste electrical and electronic equipment (WEEE):

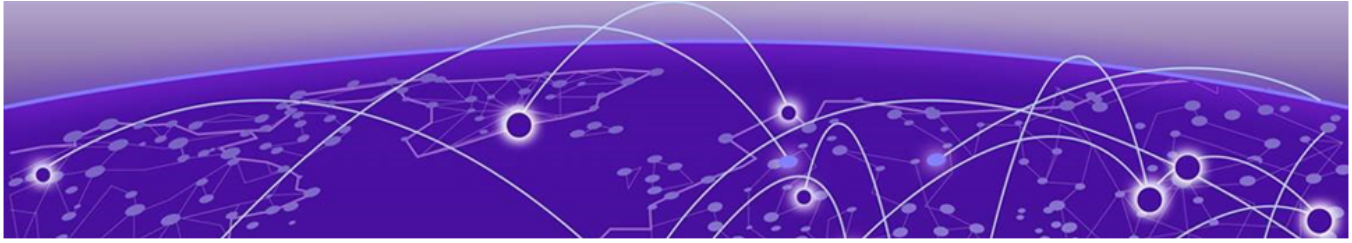
1. The symbol above indicates that separate collection of electrical and electronic equipment is required.
2. When this product has reached the end of its serviceable life, it cannot be disposed of as unsorted municipal waste. It must be collected and treated separately.
3. It has been determined by the European Parliament that there are potential negative effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.
4. It is the user's responsibility to utilize the available collection system to ensure WEEE is properly treated.

Information on the product take back program, the treatment and recycling facilities, and detailed information regarding the components, materials, and location of hazardous substances is available free of charge upon request by contacting Green@extremenetworks.com.

Declaration of Conformity in Languages of the European Community

English	Hereby, Extreme Networks declares that the radio equipment type (AP3020/X-WW) is in compliance with Directive 2014/53/EU and Radio Equipment Regulations 2017. For full text of the EU Declaration of Conformity, contact Extreme Regulatory Compliance at compliancerequest@extremenetworks.com
Finnish	Täten Extreme Networks ilmoittaa, että radiolaitetyyppi (AP3020/X-WW) on direktiivin 2014/53/EU ja radiolaitteiden säädösten 2017 mukainen. EU-vaatimustenmukaisuusvaatimuksen täydellisestä tekstistä ota yhteyttä äärimmäisiin säädösten noudattamiseen osoitteessa compliancerequest@extremenetworks.com
Dutch	Hierbij verklaart Extreme Networks dat het type radioapparatuur (AP3020/X-WW) voldoet aan Richtlijn 2014/53/EU en de Radioapparatuurverordening 2017. Neem voor de volledige tekst van de EU-conformiteitsverklaring u contact opnemen met extreme regelgeving op compliancerequest@extremenetworks.com
French	Par la présente, Extreme Networks déclare que le type d'équipement radio(AP3020/X-WW) est conforme à la directive 2014/53/UE et au Règlement sur les équipements radio de 2017. Pour obtenir le texte intégral du processus de Déclaration de la conformité de l'UE, veuillez contacter la conformité réglementaire extrême à l'adresse suivante: compliancerequest@extremenetworks.com
Swedish	Härmed deklarerar Extreme Networks att radioutrustningstypen (AP3020/X-WW) uppfyller direktiv 2014/53/EU och Radio Equipment Regulations 2017. För fullständig text av EU-försäkran om överensstämmelse, kontakta Extreme regelefterlevnad på compliancerequest@extremenetworks.com
Danish	Hermed erklærer Extreme Networks, at radioudstyrstypen (AP3020/X-WW) er i overensstemmelse med direktiv 2014/53/EU og Radio Equipment Regulations 2017. For den fulde ordlyd af EU-overensstemmelseserklæringen bedes du kontakte Extreme Regulatory Compliance på compliancerequest@extremenetworks.com
German	Hiermit erklärt Extreme Networks, dass der Funkgerätetyp (AP3020/X-WW) den Richtlinien 2014/53/EU und den Funkgeräteregelungen 2017 entspricht. Für den vollständigen Wortlaut der EU-Konformitätserklärung wenden Sie sich bitte an extreme Regulatory Compliance unter compliancerequest@extremenetworks.com
Greek	Με την παρούσα, η Extreme Networks δηλώνει ότι ο τύπος ραδιοεξοπλισμού (AP3020/X-WW) συμμορφώνεται με την Οδηγία 2014/53/ΕΕ και τους Κανονισμούς Ραδιοεξοπλισμού 2017. Για το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ, παρακαλούμε επικοινωνήστε με την ακραία κανονιστική συμμόρφωση στο compliancerequest@extremenetworks.com
Icelandic	Hér með lýsir Extreme Networks því yfir að útvarpsbúnaðurinn af gerðinni (AP3020/X-WW) uppfylli tilskipun 2014/53/EU og reglugerðir um útvarpsbúnað 2017. Fyrir fullan texta í ESB yfirlýsingu um samræmi, vinsamlegast hafðu samband við Extreme Reglufylgni á compliancerequest@extremenetworks.com
Italian	Con la presente, Extreme Networks dichiara che il tipo di apparecchiatura radio(AP3020/X-WW) è conforme alla Direttiva 2014/53/UE e al Regolamento sulle apparecchiature radio 2017. Per il testo integrale della Dichiarazione di conformità dell'UE, contattare Extreme Regulatory Compliance presso compliancerequest@extremenetworks.com

Spanish	Por la presente, Extreme Networks declara que el tipo de equipo de radio (AP3020/X-WW) cumple con la Directiva 2014/53/UE y con el Reglamento de Equipos de Radio de 2017. Para obtener el texto completo de la Declaración de conformidad de la UE, póngase en contacto con Extreme Regulatory Compliance en compliancerequest@extremenetworks.com
Portuguese	Por meio deste, a Extreme Networks declara que o tipo de equipamento de rádio (AP3020/X-WW) está em conformidade com a Diretiva 2014/53/EU e o Regulamento de Equipamentos de Rádio de 2017. Para o texto integral da declaração de conformidade da UE, contacte a conformidade regulamentar extrema em compliancerequest@extremenetworks.com
Malti	B'dan il-mod, Extreme Networks, tiddikjara li t-tip ta' tagħmir radju (AP3020/X-WW) huwa konformi mad-Direttiva 2014/53/UE u r-Regolamenti tat-Tagħmir Radju tas-2017. Għat-test sħiħ tad-dikjarazzjoni ta ' konformità tal-UE, jekk jogħġbok ikkuntattja lill-konformità regolatorja compliancerequest@extremenetworks.com



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